DEVELOPING SECURITY FORCES OFFICERS FOR THE FUTURE OPERATING ENVIRONMENT

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MASTER OF MILITARY ART AND SCIENCE General Studies

by

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14. ABSTRACT

In response to today's dynamic nonlinear operating environment, the United States Air Force Security Forces is executing a dramatic transformation of its Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities. These revisions aim to produce a capabilities-based and combat-focused force, with the capacity to actively defend and enable airpower in all operational environments, against all potential adversaries. This vital adjustment, however, has not entailed a significant revision in how the force sustains and develops mid-level officers, a necessary precursor to realizing the force's transformational objectives. To that end, this thesis will first define the character and nature of the security challenges facing the United States in the future operating environment. Then, it will identify the threats that these security challenges pose to airpower. Subsequently, it will define the desired effects (capabilities) that Field Grade Security Forces Officers must possess to defeat these predicted threats. Thereafter, it will comparatively analyze the officer development processes of certain foreign Air Base Defense forces and sister services. Finally, with an understanding of the areas of convergence amongst these various elements, it will discern and recommend a holistic officer development process, complete with the changes in organizational structure that will sustain this program, to ensure the unmitigated security of airpower.

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ABSTRACT

DEVELOPING SECURITY FORCES OFFICERS FOR THE FUTURE OPERATING ENVIRONMENT, by MAJ Eric J. Springer, 99 pages.

In response to today's dynamic nonlinear operating environment, the United States Air Force Security Forces is executing a dramatic transformation of its Doctrine, Organization, Training, Materiel, Leadership, Personnel, and Facilities. These revisions aim to produce a capabilities-based and combat-focused force, with the capacity to actively defend and enable airpower in all operational environments, against all potential adversaries. This vital adjustment, however, has not entailed a significant revision in how the force sustains and develops mid-level officers, a necessary precursor to realizing the force's transformational objectives. To that end, this thesis will first define the character and nature of the security challenges facing the United States in the future operating environment. Then, it will identify the threats that these security challenges pose to airpower. Subsequently, it will define the desired effects (capabilities) that Field Grade Security Forces Officers must possess to defeat these predicted threats. Thereafter, it will comparatively analyze the officer development processes of certain foreign Air Base Defense forces and sister services. Finally, with an understanding of the areas of convergence amongst these various elements, it will discern and recommend a holistic officer development process, complete with the changes in organizational structure that will sustain this program, to ensure the unmitigated security of airpower.

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I would first like to thank my thesis committee. Major Jennifer Crawford, as committee chair, helped focus my efforts and kept me on track throughout this process. Major Bill Percival was instrumental in helping me communicate effectively and structuring my argument logically. Dr. Don Connelly challenged my suppositions and provided an essential objective perspective in reviewing my research. Their efforts were vital to this study.

Secondly, thanks are owed to the foreign officers and fellow Security Forces leaders who freely provided me indispensable guidance and wisdom during this undertaking. It is my hope that this product is worthy of their efforts.

Most importantly, I am indebted to my wife, Stacie, my daughter, Teagan, and my son, Talon. This thesis was crafted during time that could have been spent with them.

Hopefully, it proves worthy of their sacrifice.

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ACRONYMS

ABD Air Base Defense

BAFSI Security and Intervention Forces Air Brigade (French) (*Brigade Aérienne*

des Forces de Sécurité et d'Intervention)

BSZ Base Security Zone

C4ISR Command, Control, Communications, Computers, Intelligence,

Surveillance, Reconnaissance

CBRN Chemical, Biological, Radiological, Nuclear

CPE Close Precision Engagement

FGO Field Grade Officer

FOE Future Operating Environment

MANPADS Man Portable Air Defense Systems

MET Mission Essential Task

MP Military Police

NATO North Atlantic Treaty Organization

RAF Royal Air Force

RAAF Royal Australian Air Force

SF Security Forces

SFS Security Forces Squadron

USAF United States Air Force

CHAPTER 1

INTRODUCTION

The purpose of this study is to identify a process through which the United States Air Force (USAF) Security Forces (SF) can proactively develop mid-level officers capable of securing airpower from the full range of potential threats in the future operating environment (FOE). Since releasing a "Transformation Strategic Plan" in 2006, the USAF SF has embarked on an ambitious reformation of its doctrine, organization, training, materiel, leadership, personnel, and facilities. (USAF 2006, 4) These necessary changes endeavor to ensure the USAF SF's ability to secure airpower in an uncertain future. They have, however, not been mirrored by a corresponding revision in how the force executes and sustains advanced officer development, a necessary precursor to successfully incorporating these transformational concepts into organizational culture.

Similar to the contemporary operating environment, it is highly probable that future conflicts will be waged on nonlinear battlefields against asymmetric adversaries. This condition of contemporary and future warfare requires the USAF and its joint/multinational partners to adopt an increasingly proactive approach to securing airpower. Developing officers who can effectively lead and execute an active defense is, thus, instrumental to the USAF's ability to rapidly project combat power, respond to contingencies, and decisively contribute to national defense in the FOE. To that end, this study consists of a comparative analysis of the following: (1) various national perspectives regarding the emerging security challenges in the FOE, (2) what threats

these challenges will present to airpower, (3) the desired capabilities SF field grade officers (FGO) must possess to defeat these threats to, and (4) how selected foreign air base defense (ABD) forces develop FGOs endowed with these competencies. Finally, the comparative analysis of these facets facilitates a conclusion regarding the optimum leader development approach for the USAF SF. It should be noted that, while the target of this analysis is SF FGO development, this study will examine officer development processes holistically, accounting for the effect of influences such as formal education and initial skills training, as well as contributing factors such as organizational structure.

Background

The USAF projects combat power through its forward air bases. These bases often reside in non/semi-permissive environments and require skilled, air-minded, ground combat troops to secure them. It is with this primary mission, securing expeditionary airpower, that the USAF SF are charged. SF officers are trained in light infantry ground combat skills and familiarized with the principles of active defense at a 78-day Basic Officer Course designed to satisfy initial skills training requirements and prepare junior officers to lead flight-level operations (USAF SF Center 2009c). Subsequent advanced tactical training is not made available to the officer corps uniformly, and when it is, reliance on the US Army for this training limits the developmental opportunities for female SF officers, due to gender restrictions on the part of the Army. SF-specific advanced officer development is, currently, the product of the Integrated Defense Command Course, designed for deployable headquarters elements, and the 5-day SF Advanced Officer Course, which facilitates pre-command training (USAF SF Center

2009b). Cumulatively, this system has produced officers with wide variances in operational expertise, competence, and suitability for combat leadership. As a result, the USAF SF is incapable of uniformly generating the required effects in combat, throughout its officer corps. This situation presents an unacceptable risk to expeditionary airpower and hinders the noteworthy efforts to transform the USAF SF into a combat-focused force (USAF 2009b, 7).

The realities of the contemporary operating environment have forced the USAF SF to reconstruct themselves as a battle ready ground combat force operating exterior to an air base's perimeter in the base security zone (BSZ), fully networked and integrated with other ground combat elements and capable of delivering greater airpower effects for combatant commanders. Air bases no longer exist in the rear. Quite often they are situated in the midst of an area of operations where they can provide the greatest utility and combat reach. Such forward presence endangers airpower when it is most vulnerable, on the ground, and necessitates a committed and purpose-built force capable of ensuring that US forces maintain uninterrupted access to the benefits of air superiority; aerial interdiction; strategic attack; intelligence, surveillance, and reconnaissance; air mobility; and close air support.

Delivering this capability in the joint environment is a mission most effectively and efficiently executed by USAF SF, vice sister service forces, a realization underscored by the decision to assign base defense responsibility at Joint Base Balad, Ali Air Base (Tallil), Kirkuk Regional Airport, and other Operation Iraqi Freedom airfields to the USAF SF (Holmes et al., 43). SF executing Air Base Defense (ABD), and thus freeing

sister service ground combat forces from this responsibility, allow those forces to project power and mass effects further than otherwise possible.

Transforming the SF's mission essential tasks (MET) from a garrison focused perimeter defense to an aggressive expeditionary focused defense capability has resulted in changes to the way SF are organized, trained, equipped, and deployed. These changes, however, are ineffectively realized if they are not understood, supported, and institutionalized by mid-level officers in the field or on various staffs. Two examples highlight this problem: employment of close precision engagement (CPE) teams and the decision to remove the M252 81 mm mortar system from the SF inventory.

Realizing the threat that enemy snipers pose to aircraft and aircrews, the USAF deploys well equipped CPE teams trained rigorously in counter-sniper operations and has developed written guidance for sharpshooter employment officers (USAF SF Center 2009d). A true force multiplier, CPE teams possess the capability to exponentially increase the combat capability of a deployed SF squadron. However, commanders who are untrained and unfamiliar with employing this resource have hesitated to utilize it for its desired purpose. As a result, the lack of officer leader development has hampered the combat effectiveness of an otherwise invaluable resource.

In a similar manner, employment of 81mm mortars for base defense enables greater freedom of maneuver for the USAF by extending the range of security patrols. This realization is self-evident to airmen at the tactical level (officer and enlisted) who have benefited from organic indirect fire support. Unfortunately, it was not equally apparent to leaders at the organizational level who made the decision to remove this weapon system from the inventory in a cost cutting measure, a deficit realized in combat

by the inability to counter enemy indirect fire or provide organic fire support to friendly forces.

A potential cause for these disconnects is the absence of advanced officer development. While a common basis is formed in SF officers during their Basic Officer Course, a career field as broad as the USAF SF has the potential for producing widely divergent officers who, within the FGO ranks, will have careers weighted by operational experience in either ABD, nuclear security, or garrison security/law & order. These diverse mission areas represent complementary elements of the Protection function, but SF execution of these missions has, historically, been divergent. The influence of these dissimilar approaches has been to advance specialization amongst the officer corps, vice generalization. In many cases such specialization would not be problematic, but SF officers are expected to be capable of uniformly executing the diverse facets of their profession. In reality, the divergent approaches to executing the various SF missions, combined with the heightened threats of the contemporary operating environment, increase the risks associated with multifunctionality in the officer corps. Without significant advanced officer development, an officer weighted in ABD, for example, would be appreciably challenged in executing nuclear security duties. Similarly, an officer weighted in nuclear security would be unprepared to command an expeditionary ABD operation. Contributing to this trend are the limitations of the force's current professional development protocols.

Attendance of the Integrated Defense Command Course, for example, is limited to only those officers who are assigned to deployable headquarters elements and is primarily concentrated on expeditionary staffing actions, as opposed to focused

development for all officers. In a similar manner, the Advanced Officer Course addresses the bureaucratic and managerial functions associated with squadron command, as opposed to truly producing officers who are uniformly capable of defending airpower in the FOE.

A dedicated and institutionalized mid-level officer development process serves to "re-blue" these officers, educate them on the employment of emerging capabilities, ingrain within them the principles of executing SF operations at the squadron level and higher, and, most importantly, prepare them to defeat the USAF's likely enemies in the FOE. Without significant advanced officer development these leaders will not be capable of generating uniform effects as FGOs.

Primary and Secondary Research Questions

What is the optimum officer-leader development process for the United States Air Force Security Forces? Secondary questions are:

- 1. What are the notional threats to security in the FOE?
- 2. What are the primary threats to airpower in the FOE?
- 3. What are the desired effects/capabilities of field grade SF officers?
- 4. How do foreign ABD forces/sister services conduct officer continuation training or otherwise develop mid-level officers?

Definitions

This section defines key terms relevant to clearly understanding the subject at hand. It is a compilation of Air Force, sister service, and multinational terms which enable a fuller understanding of the concepts analyzed by this study.

Asymmetric Avoidance Behavior. A tactic advocated by the contemporary and future adversaries of the US and her allies. Realizing that they are unable to challenge the US with conventional military operations, these forces pursue unconventional means of confrontation. At the operational and tactical level this tactic manifests itself in the form of terrorism, insurgency, subversion, and information operations, making decisive military response problematic for the West (Australian Army Future Land Operational Concept 2005, 9).

Base Security Zone (BSZ). The area outside a base perimeter from which the base may be vulnerable from standoff threats (e.g. mortars, rockets, man-portable air defense systems). The base commander is responsible for identifying the base security zone and coordinating with the host nation or area commander for the BSZ to be identified as the base boundary. If the base boundary does not include all of the terrain of the BSZ, the base commander is still responsible for either mitigating (through coordination with the area commander or host nation) or accepting the risks of enemy attack from the terrain outside the base boundary (Air Force Tactics, Techniques and Procedures 3-10.2 2008, 28).

Brigade Aerienne des Forces de Sécurité et Intervention (BAFSI). The BAFSI is one of the French Air Force's four Air Brigades which, commensurate with the force's reorganization in concert with the Air 2010 concept, represent functional groupings of complementary forces. Specifically, the BAFSI is charged with command and control of the following forces supporting the Protection function: Commandos de l'Air, Pompiers de l'Air (CBRN and Fire Defense).

<u>Commander's Critical Information Requirements</u>. An information requirement identified by the commander as being critical to facilitating timely decision-making. The two key elements are friendly force information requirements and priority intelligence requirements (Joint Publication 3-0 2006, GL-9).

<u>Defeat Threshold</u>. How much and for how long one must damage a force to defeat it (Australian Army Future Land Operational Concept 2005, 13).

<u>Fusiliers Commandos de l'Air</u>. French Airmen charged with executing the following missions in support of the Protection function: ABD, Nuclear Weapon Security, Counter-Terrorism, Counter-Narcotics. Specially trained members of this force perform combat search and rescue, terminal attack, and airfield seizure operations. These airmen are organizationally assigned to the BAFSI.

Integrated Defense. The integrated application of offensive and defensive actions, both active and passive, taken across the ground dimension of the force protection battlespace to achieve local and area dominance (Air Force Doctrine Document 2-4.1 2004, 39).

Intelligence Preparation of the Operational Environment. An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. Intelligence preparation of the operational environment builds an extensive database for each potential area in which a unit may be required to operate. The database is then analyzed in detail to determine the impact of the enemy, environment, and terrain on operations and present it in graphic form.

Intelligence preparation of the operational environment is a continual process (Joint Publication 1-02 2009, 271-272).

Mission Command. The conduct of military operations through decentralized execution based upon mission orders for effective mission accomplishment. Successful mission command results from subordinate leaders at all echelons exercising disciplined initiative within the commander's intent to accomplish missions. It requires an environment of trust and mutual understanding (US Army Field Manual 6-0 2003, 1-67).

Objektschutzregiment der Luftwaffe. This regiment is the German Air Force's Force Protection organization. It consists of two active battalions and one reserve battalion of infantry-oriented ABD forces. A fourth battalion contains personnel specialized in air defense, CBRN defense, fire fighting, expeditionary engineering, and explosive ordnance disposal. As such, this regiment reflects an effort to organizationally integrate complementary Protection related functions. Furthermore, the members of this regiment, regardless of their specialty, share the foundation of a common ground combat skills course before receiving further training in their particular areas of expertise.

<u>Protection</u>. Preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area (Joint Publication 1-02 2009, 440).

Regimental System. Regimental organizations centralize command and control of their assigned units, and assign those forces to directly support the larger force in concert with centrally established priorities. In the context of this study, the regimental construct is demonstrated by the RAF Regiment, German Objektschutzregiment, and French BAFSI, in that these institutions integrate complementary elements of the Protection function within the same organization. Conversely, a non-regimental system, as

exhibited by the USAF, US Army, and RAAF Airfield Defence Guards decentralizes control of complementary functions, strengthening the command authority of the supported force, but serving to weaken functional integration, interoperability, and economy of force.

Royal Australian Air Force (RAAF) Airfield Defence Guards. The Airfield Defence Guards conduct ground defense operations in support of the RAAF. These duties entail ABD, as well as CBRN defense, explosive ordnance disposal, and training the members of the RAAF in ground defense operations. The RAAF's Airfield Defence Squadrons are organizationally controlled by the 395th Combat Support Wing of the RAAF's Combat Support Group.

Royal Air Force (RAF) Regiment. The RAF Regiment executes ground combat and CBRN defense operations to protect the RAF. Thus, it represents a force designed to integrate and centrally command the execution of complementary protection related functions. It consists of eight active and three auxiliary field squadrons and one active and one auxiliary CBRN squadron. In addition to its primary missions, it provides terminal attack support to the British Army and facilitates ground defense training for the members of the RAF.

Shape. The ability to conduct activities to affect the perceptions, will, behavior, and capabilities of partner, competitor, or adversary leaders, military forces, and relevant populations to further US national security or shared global security interests (Expeditionary Air Base Defense Enabling Concept (Draft) 2008, 34).

Limitations

The ability to research and study foreign air force doctrines is limited by national policies restricting the international dissemination of domestic military doctrine. As a result, this study's degree of insight into certain forces was limited compared to others.

Delimitations

This study did not perform a cost-benefit analysis of any conclusions or recommendations. Additionally, divergent gender policies between the USAF SF and sister services have implications for conducting joint training. This study did not formally address the effect of these policies, with the exception of identifying that reliance on sister services for advanced training and development may contribute to a gender-based imbalance in advanced officer development within the USAF SF.

Furthermore, the focus of this study is advanced development within the USAF SF's commissioned officer force. While many aspects of this analysis may prove to be applicable to the SF enlisted force as well, this study did not identify those factors.

Significance of Thesis

Today's nonlinear battlespace presents increased threats to airpower and heightens the need for SF personnel, especially mid-level officers, to proactively defend the USAF's bases and assets. Achieving this goal furthers USAF power projection, operational reach, and contribution to national security. In addition, an understanding of emerging threats and their causes enables the development of SF FGOs who possess the requisite skill sets to defeat these future hazards.

While the USAF SF has executed an aggressive transformation plan, aiming to protect airpower today and in an uncertain future, this plan has not spurred significant revision of officer development processes, a necessary pre-condition to incorporating the force's transformational goals. Furthermore, this disconnect has prevented the SF from developing mid-level officers who are uniformly capable of securing airpower against the full spectrum of possible threats. This condition inhibits the SF ability to "redefine organizational culture," enforce standards, and ensure the proper employment of limited manpower and materiel (USAF 2006, 4). Consequently, the USAF is faced with unacceptable physical and operational risks.

Advanced officer development is the primary means of producing an SF FGO corps that can uniformly secure airpower in an uncertain future threat environment. The conclusions derived from this study will facilitate the implementation of an officer development process that realizes this objective.

CHAPTER 2

LITERATURE REVIEW

Commensurate with the research questions that will facilitate a conclusion regarding SF advanced officer development, literature concerning two primary subjects is essential to developing a framework for the subject of this analysis. First, it is essential to consult the varied domestic and international reference materials which have attempted to deduce the nature of future military conflict. This material consists of official Department of Defense and service policies, as well as white papers, operating concepts, and doctrinal publications from our allies and the coalitions they represent.

Subsequently, this analysis will compare various perspectives concerning the likely threats to airpower resulting from the character of the future security environment. The primary source materials for this subject are domestic and international joint publications, RAND Corporation studies, concepts of operations and professional journals.

A comprehensive deduction of the projected threats to airpower will facilitate an understanding of the desired capabilities of SF officers in the FOE. In turn, a comparative analysis of the officer development processes of the USAF SF comparable foreign partners and sister services, enabled by training reports, regulations, course training standards, interviews, and web-based research facilitates the development of an optimum advanced officer development process for the USAF SF.

Future Operating Environment

At the US strategic level four significant documents shape the national vision regarding the FOE: the 2006 National Security Strategy, the 2008 National Defense

Strategy, the 2006 Quadrennial Defense Review, and the 2008 National Military Strategy. Collectively, these documents provide context to the strategic framework and shape the organization, training, and equipment of the military services. Furthermore, they focus the services on the origins and character of future combat associated with violent extremism, irregular challenges, nuclear proliferation, and other threats.

Similarly, many of our allies have crafted literature to influence the strategic vision of their defense forces. A great deal of integration regarding these visions occurs within the Air & Space Interoperability Council, the air component of the alliance between the US, United Kingdom, Canada, Australia and New Zealand. For example, Australia's Future Warfighting Concept provides strategic and operational guidance for the Australian Defence Force, and along with the British Strategic Defence Review, Strategic Trends Programme 2007-2036, 3rd ed., and various Defence White Papers articulate the need for common approaches to uniformly identified threats. These approaches reinforce American operational concepts and organizational structures, and, along with French and German doctrines, further an understanding of American dominance in contemporary conventional conflicts.

French insight into the emerging security challenges of the FOE can be seen in the French Army's Winning the Battle Building Peace: Land Forces in Present and Future Conflicts and the general military review journal, Doctrine, addressing Ongoing Reflections on the Future Employment of Land Forces. In addition, the French White Paper on Defence and National Security draws conclusions regarding the FOE which complement those of the American national command authority. Lastly, Germany's Konzeption der Bundeswehr and the 2006 White Paper on German Security Policy and

the Future of the Bundeswehr reinforce observations regarding the absence of conventional forces posing existential threats to western nations and conclude that the rise of non-state actors and other factors has appreciably changed the international security environment.

What this strategic environment portends for the joint force is the subject of the US Joint Forces Command's *Joint Operating Environment: Trends and Challenges for the Future Joint Force Through 2030*, which serves as a "a research-based grounding for further discussions about the implications of potential future operational environmental trends for the joint training, experimentation, doctrinal development, and operational communities" (US Joint Forces Command 2007, 1). Once again, America's allies are equally committed to analyzing the FOE at the operational level. Notably, the Australian Army's *Complex Warfighting* and *Adaptive Campaigning* Future Land Operational Concept share much with the American concept of Full-Spectrum Operations (viewed by Air & Space Interoperability Council partners as a commonwealth approach) in a future punctuated by "persistent conflict" (US Army 2008, 1-1).

Threats to Airpower

In the context of these strategic perspectives, each nation's air arm has endeavored to identify the primary threats to airpower. Specifically, the RAF and RAAF have published *Future Air and Space Operational Concepts*, which highlight air power's unique roles and capabilities in combating emerging threats, and *Airpower Doctrine* publications, which identify the perceived vulnerabilities of this core competency and the means to defend it in the FOE. Unique insights into the importance of air bases in power

projection are afforded by the RAAF's Chief of Air Force Occasional Paper 3- Air

Bases: The Foundation of Versatile Air Power. In addition, Germany's Einsatzkonzept

Objektschutz in der Luftwaffe details an organizational and operational response to the

emerging threat environment. The French perspective on this matter can be gleaned from
doctrinal publications regarding La Protection de la Force and the USAF perspective can
be seen in the SF's Transformation Strategic Plan, Headquarters Air Force Security

Forces Master Action Plan 2010-2015, Air Force Instructions concerning Integrated

Defense, and concepts such as the Expeditionary Air Base Defense Enabling Concept and
Agile Combat Support Concept of Operations.

Lastly, several research pieces are worthy of considerable review: Rebecca Grant's Airpower in a Fragmented Battlespace; the RAND Corporation's Project Air Force studies Fighting Airbases Under Attack: Forward Operating Bases, Common Battlefield Training for Airmen, Finding the Balance Between Schoolhouse and On-the-Job Training, Ungoverned Territories: Understanding and Reducing Terrorism Risks; and the Air & Space Power Journal article The Air Force's New Ground War. Grant's work specifically studies the implications of nonlinear battlespace for the command, control, coordination and employment of air and space forces. In addition, the RAND studies attempt to discern the various threats to air bases in the contemporary operating environment and propose methods to limit the disruption of air operations in the face of enemy attack, analyze the benefits of integrating training for ground combat airmen, and identify the likely locations of future expeditionary operations. Finally, the Air & Space Power Journal piece presents the USAF SF's contemporary approach to actively effect air base defense.

Summary

A thorough appreciation of the significant literature concerning emerging security challenges, the threats they pose to airpower, and the capabilities needed to defeat these dangers is essential to this analysis. The perspectives afforded by the various governmental publications presented above paint a picture of the security environment that military forces must contend with in the future. Building upon this understanding, the diverse material on airpower's vulnerabilities in this setting facilitates conclusions regarding the capabilities SF FGOs must possess to defend these resources. Finally, these deductions, when applied to the proper research methodology, will enable the development of an optimum SF officer development process.

CHAPTER 3

RESEARCH METHODOLOGY

ABD in various threat environments has been widely studied since the inception of air power as a strategic force. While these studies have concentrated on the success of various techniques, tactics, and procedures in securing airpower, the importance of leadership in ABD has not been adequately analyzed. This study consists of a comparative analysis of the leader development processes of various ABD forces and related military organizations. In particular, it will assess what these forces perceive as the primary security challenges in the FOE, and discern the likely threats to airpower resulting from these future security challenges. Subsequently, a qualitative analysis of these challenges and threats will determine the necessary capabilities an officer requires to successfully lead ABD operations in the FOE, and comparatively evaluate the processes used to produce these effects. Finally, the conclusions drawn from this qualitative analysis will facilitate the development of recommendations for the effective development of mid-level SF officers.

This chapter begins by identifying the steps taken to obtain information relevant to the proposed analyses. Next, research criteria, consisting of the suitability of the methods prescribed, the selection of various forces for the comparative analysis, and the credibility of the source material is addressed. Then, research methodology is conveyed. Finally, the strengths and weaknesses of this approach are presented.

Steps Taken to Obtain Information

The primary research material for this study consists of official national, departmental, and service publications, as well as research papers, professional journals, and academic studies. Compiling this information was made possible by accessing databases at the US Army Combined Arms Research Library, national and international doctrine repositories, and other web-based sources.

Research Criteria

A comparative analysis of competing systems (ABD forces) which enabled a qualitative analysis of which system best prepares forces for the FOE was the most optimum method to form conclusions regarding the development of mid-level officers charged with securing airpower. While a qualitative analysis may suggest that the results of the analysis are subjective, a quantitative analysis which would lend greater objectivity to any conclusion drawn was not appropriate. This study observes that the historical success of several organizations in conducting ABD is unquestioned. Additionally, other forces which may not have accumulated an equal degree of historical experience have nonetheless developed innovative processes that warrant their inclusion in this study.

In addition to the USAF SF, the RAF Regiment and Commandos de l'Air have significant historical experience which qualifies them as experts in the field of ABD. The RAF Regiment has been in service since 1942 and has amassed operational experience across the spectrum of conflict, from major combat operations in World War II to counterinsurgency operations in Northern Ireland, Iraq, and Afghanistan. Counterinsurgency operations in Algeria provide the foundation of ABD operational experience

for the Commandos de l'Air. Additionally, The RAAF's Airfield Defence Guards have gained unique low intensity conflict experience from the Middle East as well as peacekeeping operations in the South Pacific. Finally, the German Objektschutzregiment der Luftwaffe has introduced noteworthy operational concepts which are worthy of analysis as a component of this study.

Research Methodology

Answering this study's primary research question was contingent upon initially resolving, in order, the secondary questions presented in chapter one. To that end, this study first analyzes the FOE, defining the expected nature and character of the emerging security environment. Subsequently, it assesses the emerging threats to airpower that can be expected in consideration of the FOE. Next, an understanding of these expected threats facilitates an understanding of the desired capabilities of mid-level officers conducting ABD in the FOE. Then, the study assesses how the various ABD organizations analyzed produce officers capable of achieving these effects. Finally, this research enables the development of recommendations for the improvement of mid-level officer development within the USAF SF.

Strengths and Weaknesses of Methodology

The strengths of this research methodology lay in the diverse approaches the various ABD forces employ to tackle essentially the same challenge. Comparing their approaches identifies areas of convergence and divergence. Moreover, it illuminates how the operational experience of each force shapes their execution of ABD and, most importantly, mid-level officer development.

However, it must be noted that while each force has the unifying task of securing airpower, it is apparent that none of these forces achieve this objective in exactly the same way. The French, for example, are responsible for combat search and rescue, terminal attack, airfield seizure, and nuclear weapon security, in addition to their ABD mission. Likewise, the Germans support North Atlantic Treaty Organization (NATO) nuclear weapon security efforts and conduct ground based air defense, firefighting and Chemical, Biological, Radiological, Nuclear (CBRN) defense missions. Similarly, the RAF Regiment trains the members of its parent service in CBRN defense and provides terminal attack services to the British Army. Correspondingly, the RAAF Airfield Defence Guards provide CBRN and Explosive Ordnance Disposal support to the RAAF. The USAF SF, in contrast, conducts air provost operations in addition to security operations. These divergences, however, should not be viewed as elements that weaken the research or its conclusions, but as data which may strengthen a conclusion that the FOE increasingly requires integrating various complementary elements of the protection function.

Summary

Identifying the optimum officer development process for the USAF SF is contingent upon a research methodology which adequately answers the secondary research questions posed in chapter 1. To that end this study first deduces the nature of the FOE. Then, it discerns the threats this environment will pose to airpower. Subsequently, it concludes the desired capabilities which allow SF FGOs to defeat these hazards. Thereafter, it compares the processes by which certain ABD forces and sister

services produce officers with these competencies. Finally, a qualitative analysis of these systems permits the formation of a development protocol which will arm SF FGOs to defend the USAF in an uncertain and hostile future.

CHAPTER 4

ANALYSIS OF AIR BASE DEFENSE FORCES

Protection is an integral component of military operations in all environments. Lack of protection represents a single point of failure to the attainment of operational and strategic objectives and must be an element of planning and orders production at all levels. Airpower advocates, recognizing the increasing high demand/low density nature of their weapons systems, must be even more aggressive in defending their combat power. Consequently, the world's most capable air and space forces have organized, trained, and equipped personnel specifically committed to the defense of their air components: the RAF Regiment, French Commandos de l'Air, Objektschutzregiment der Luftwaffe, RAAF Airfield Defence Guards, and USAF SF. While there are many more examples of forces specifically designed for ABD, the aforementioned organizations each provide unique perspectives which contribute to answering the primary and secondary research questions introduced in chapter 1. To that end this chapter will examine how these forces develop officers capable of securing airpower against the full spectrum of threats in a future which, according to most estimates, will be defined by persistent conflict.

Notional Threats to Security in the FOE

The airpower theorist Giulio Douhet famously remarked that "victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after they occur" (Douhet 1983, 30). This verity charges military strategists continually to refine their craft, to determine the capabilities required to prevail

in future conflicts, and to chart a course to prepare their forces for a future of persistent conflict. In analyzing the FOE, it is apparent that two distinct environmental factors must be considered: (1) globalization and its effects, and (2) "the key environmental trends of complexity, diversity, lethality and diffusion" (Australian Army 2005, 7).

From a threat perspective, the primary effect of globalization is "the growing interconnection between threats and risks" (Ministère de la Défense 2008, 5). Today's global village, with the dispersal of advanced communications infrastructure, has enabled unprecedented interconnectedness between the populations of the world. Along with the capability of these impressive technologies to further peaceful interaction and understanding, this infrastructure also has enabled hostile forces to synchronize their efforts and disseminate destructive methodologies, tactics, and procedures. As technology becomes even more portable, compact, and easy to employ, there will be a corresponding increase in the threat of sabotage, subversion, and espionage, to national security and military forces operating at home and in the global commons.

A secondary effect of increasing globalization is the inability of governmental forces to exercise a monopoly over the security environment. Multinational corporations, trans-national organizations, international criminal syndicates, and non-state actors have an increasing stake in the success or failure of globalization (Australian Army 2005, 8). This circumstance will degrade national sovereignty and heighten the threat of hostile action originating from ungoverned regions such as the Western Sahara, Pakistan's Federally Administered Tribal Areas, or Somalia (Rabasa, Angel, et al, 2007, 1-2). Therefore, future international security will hinge, to an increasing degree, on building the capacities of local governments to influence and control their sovereign territories.

These efforts are likely to be combated by hostile forces seizing upon globalization's perceived inequality and the sociocultural disruptions it produces.

Due to declining birth rates in industrialized nations and the inversely proportionate expansion of population sizes in developing nations, rich states will comprise an ever dwindling percentage of the global populace (US Joint Forces Command 2007, 8). On the other hand, the poorest and most economically depressed nations will be forced to struggle with "rapid population growth and growing mega-cities, and cultural and environmental change that stresses already-fragile social and political structures" (US Joint Forces Command 2007, 4). In short, "[g]lobalization will lift millions from abject poverty, but its uneven impact will produce social dislocation, and because of raised expectations may produce dissonance and disorder if societies cannot translate gains in global trade into local prosperity" (US Joint Forces Command 2007, 4). In observation of these effects regarding the human geography in developing countries, national security strategists must consider the likelihood of intervention in those countries to prevent the emergence of security threats, especially in regions where the impacts of globalization and climate change are predictably most severe. Terrorists and other actors are likely to exploit the vulnerable, uneducated, and desperate segments of these societies to recruit forces to attack developed states.

As a reaction to this non-state origin to many contemporary and future security threats, national security itself can no longer be viewed as bounded by the constraints of international borders. Future adversaries need not physically attack the sovereign immunity of a state to disrupt its economic, informational, industrial, or political power. They may just as effectively realize their objectives by causing or exploiting several

potential "shocks" to the international system, to include:(1) disruption of energy supplies or the development of alternatives to oil, (2) technological surprise, (3) preventing access to the global commons, (4) creation or dissemination of a pandemic which sickens or kills a significant portion of the world's populace,(5) stimulating a global economic depression or, possibly, (6) employing weapons of mass destruction against population centers (US Joint Forces Command 2007, 51-55).

These observations highlight the second developing trend regarding globalization, which is that "the traditional distinction between domestic and foreign security has lost its relevance" (Ministère de la Défense 2008, 5). Operationally, modern military forces have accepted the nonlinear nature of the modern battlefield. In the future, international boundaries may be rendered largely irrelevant in identifying the presence of security threats. With this realization, military strategists and national security advocates must adopt increasingly proactive defense policies which attack the root causes of instability rather than simply their effects. Power projection and the speed with which military forces can be mobilized to react to changes in the security environment will become key enablers to military operations throughout the spectrum of conflict, along with effective countermeasures to the various anti-access strategies that these forces may contend with (US Joint Forces Command 2007, 44). Furthermore, attacking the root causes of instability will also require the physical presence of military forces as a means to shape and influence populations, provide necessary services, and ensure governmental legitimacy.

Combating instability is not a threat which military forces should prepare to engage solely on foreign soil. Domestically, western societies, as a result of increased

immigration and their sociocultural openness, have assimilated large disparate populations, significant elements of which may not integrate seamlessly into societies that they view as immoral and nontraditional. The presence of these populations could pose considerable internal threats to national sovereignty, especially during times of depressed economic conditions. Reacting to this evolving dynamic within the United States will force the Department of Defense and the National Command Authority to continuously review the roles of military forces in the domestic environment, not just during national emergencies, but as a matter of common practice.

The aforementioned observations reflect a growing understanding amongst military strategists in the United States, Britain, Australia, France, and Germany, that the threat of conventional war is diminishing. American dominance on the battlefield makes conventional attack against the United States and its allies an increasingly reckless venture for hostile states in the future. While the benefits of this conventional superiority to the well-being of America and its allies cannot be overstated, this condition will force committed adversaries to adopt policies of "asymmetric avoidance behavior," employing unconventional means to attack and exhaust the West (US Joint Forces Command, 64 and Australian Army 2005, 9). The operational environment resulting from this behavior will be increasingly complex, diverse, diffuse, and lethal.

Defining the asymmetric means future adversaries will employ is a complex process which impacts all aspects of a defense force's doctrine, organization, training, materiel, leadership, personnel, and facilities. Within America's national security structure several products contribute to this effort: the *National Security Strategy*, the *National Defense Strategy*, the *National Military Strategy*, and the *Quadrennial Defense*

Review. The joint community's primary analytical work concerning this subject is Joint Forces Command's Joint Operating Environment: Trends and Challenges for the Future Joint Force through 2030. Internationally, the RAF and RAAF Future Air and Space Operational Concepts, the Australian Army's Adaptive Campaigning and Complex Warfighting Future Land Operational Concept, and Germany's Konzeption der Bundeswehr provide ample examples of America's partners attempting to formulate a conceptual framework for the FOE and how their forces must be arrayed to prevail against future adversaries. These publications coalesce around the previously stated conclusions that warfare will be increasingly complex, diverse, diffuse, and lethal.

Complexity will demonstrably increase in three environmental factors: (1) physical terrain, (2) human terrain, and (3) informational terrain (Australian Army 2005, 11). Of the world's population, 75 percent resides within complex physical terrain that is at once restrictive and open, urban and rural, with varying degrees of industrialization and population density (Australian Army 2005, 11). Military campaigns in the future will not be waged on a frontier of the West's choosing, but increasingly amongst the people. This is the key terrain that must be held in low intensity conflicts. The change reflects the previously described asymmetric avoidance behavior enemy forces will pursue in reaction to the conventional superiority of the US. It also reinforces the need for understanding, at the lowest tactical levels, the complex human terrain within an operational area (Australian Army 2005, 11).

The "strategic corporals" of the future must be armed with an advanced comprehension of the sociocultural factors, linguistic traditions, and motivations of the diverse populations interacting within this area to enable targeted and effective

information operations that will shape a population's perception and enhance security. The informational terrain within which these operations are executed will be increasingly complex, a function of the speed at which data can be captured, interrogated, and exploited. For friendly forces this dynamic can result in the enhanced situational understanding provided by persistent intelligence, surveillance, and reconnaissance assets, identification friend or foe resources, and other facets associated with networkcentric warfare. From a threat perspective, however, the informational terrain increasingly will allow hostile forces to gain strategic leverage from events which friendly forces may perceive as tactically insignificant, a phenomenon demonstrated in Iraq and Afghanistan by enemy information operations exploiting coalition detainee abuse and information operations exploiting improvised explosive device attacks against coalition forces. The interaction of complex physical, human and informational terrain reinforces the need for today and tomorrow's armed forces to prepare for full spectrum operations throughout the continuum of possible threats within an exceedingly diverse operational environment (Australian Army 2005, 11).

Diversity within the FOE primarily will be seen in the divergent defeat thresholds between the US and her expected enemies (Australian Army 2005, 13). In particular, military strategists must prepare for operational environments within which US forces have a combination of high tactical and low strategic defeat thresholds, the direct converse of likely adversaries. What this disparity portends for the FOE is that historically insignificant loss of life on the part of friendly forces and civilians may rapidly degrade public opinion and support for protracted military operations. Similarly, the manner in which future military operations are executed is as important as the result

of those operations. Dealing with this threshold mismatch will require military strategists to master diffusion within the FOE (Australian Army 2005, 13).

Globalization has contributed to a diffusion in conflict, a trend witnessed in the following examples: (1) levels of war, (2) state/non-state actors, (3) conventional/special operations, and (4) virtual theaters (Australian Army 2005, 14). The degree to which the US defense policy accounts for these shifts will define its level of operational success in the FOE.

Traditionally, security strategists view the tactical, operational, and strategic levels of war as distinct and clearly defined elements. In contemporary operations, however, they are becoming increasingly compressed so that the actions at one level have an immediate effect on the others. Significantly, the operational level is becoming increasingly irrelevant (Australian Army 2005, 14). Organizationally, this is reflected in the shift within the land component to a "brigade-centric" Army, and a corresponding deemphasis on division level operations. Yet this phenomenon is not limited to ground combatants. With the preponderance of air force combat operations being executed by non-flying personnel, the USAF must also analyze whether contemporary conclusions regarding airpower, its command and control, and its security are adequate for the FOE.

The presence of non-state actors on the battlefield is hardly a new development, but the capability of these actors to possess and employ weaponry and tactics within the historic capacity of sovereign states is an increasingly common trend. During the 2006 Israeli invasion of Lebanon, for example, war was made against Israel contrary to the wishes of Lebanon by Hezbollah, a non-state terrorist group possessing sophisticated weaponry and controlling territory within a sovereign state. In addition, terrorist forces

continue to exploit the porous and ungoverned border regions of developing countries to reconstitute, refit, and train for guerrilla operations. Thus, national security will be increasingly contingent on the ability to shrink ungoverned locales such as Pakistan's Federally Administered Tribal Area (Rabasa et al. 2007, 1-2).

Contemporary operations demonstrate the need for conventional forces to possess skill sets normally reserved for Special Forces. Similarly, Special Forces have found themselves engaging in operations normally conducted by conventional forces. Thus, both of these elements have been forced to integrate to an increasing degree, as the nonlinear battlefield has blurred the mission areas of these two elements, a trend which is likely to continue.

Contributing to the complex nature of diffusion is the presence of virtual theaters. Cyber warfare specialists and Unmanned Aerial Vehicle operators may not be physically located within the operational theaters they are supporting. This dynamic raises questions concerning their command and control, legitimacy as military targets for the enemy, and, correspondingly, the criticality of their protection at home.

Finally, increasing lethality will become a significant factor in the FOE.

Contemporary efforts to transform the US armed forces have focused on increasing the survivability, interoperability, and lethality of the individual Soldier, Sailor, Airman, and Marine. It must be realized that America's enemies are transforming in a similar manner. The threat posed by a dedicated individual armed with systems as divergent as a weapon of mass destruction or a sniper rifle can have calamitous strategic effects, especially against forces with low strategic defeat thresholds that employ significant high demand/low density resources. This development will further the need for friendly forces

to gain and maintain situational understanding, be proactive rather than reactive, be highly mobile, and capable of rapidly bringing joint precision fires to bear. It will also require the presence necessary to shape the operational area in a manner that makes it inhospitable for hostile forces and supportive of friendly action.

Warfare has changed from the industrial age methods of the Cold War to the complex, diffuse, diverse, and lethal characteristics of military operations in today's globalized, dynamic, and fluid operating environment. This trend, most likely, will continue into the future placing increasing pressure on military forces committed to national security and international stability in the face of the full spectrum of potential threats. Airpower may prove to be even more decisive in the FOE due to its speed, flexibility, range, and ability to deliver precision effects in support of national security objectives. However, the escalating importance of air assets also increases their value as military targets for enemy forces. Success in the FOE may be contingent on the ability not only to project airpower but to protect this critical capability.

Primary Threats to Airpower in the FOE

A developing conflict environment, characterized by globalized information systems and increasing complexity, diversity, diffusion, and lethality on the battlefield, is thus intersecting philosophically with air forces required to assume an increasing expeditionary posture in response to changes in global security. At the same time, airborne weapon systems and strategic deterrence assets are decreasing in density, reducing their redundancy, and increasing in value. These trends raise their worthiness as targets for enemy action. All of this is occurring in predominantly noncontiguous

operating areas where friendly air forces with low strategic defeat thresholds are well within the operational reach of a host of active and passive adversaries. In response to this shift airmen internationally have become increasingly committed to their own defense, a trend realized within the United States with the publication of Joint Publication 3-10, Joint Security Operations, and the abrogation of Joint Service Agreement 8 (USAF 2008b, 2). This accord, designed for a linear battlefield which no longer exists, was an Army-USAF agreement which held that the Army would provide external defense of expeditionary air force bases. Its revocation was followed by the issuance of Joint Publication 3-10, authorizing the USAF to execute aggressive external ABD operations (USAF 2008b, 3). Within the USAF, the primary operating areas which must be secured to satisfy this defensive requirement are the expansive BSZs surrounding airfields. Not limited to the confines of a base perimeter, this area includes aircraft approach and departure vectors, and terrain from which enemy stand-off weapons could disrupt air operations (USAF 2009c, 35). This tactical adjustment impacts the operational and strategic levels of war, increasing the air component's flexibility and operational reach while providing combatant commanders with increased operational capability. Realizing these benefits, however, is contingent upon a proper analysis of the developing threats to airpower, a subject of intense scrutiny for the military forces being analyzed in this study.

Before analyzing the specific threats facing airpower in the FOE, it is important to realize that contemporary notions of what constitutes "airpower" continue to evolve.

Combat aircraft, due to their ability to attack enemy personnel, materiel, and will are very powerful visible symbols of the combat power the air component provides. Today and in the FOE, space-based assets and their ground support infrastructure, mobility aircraft

conducting maneuver and delivering critical sustainment in nonlinear theaters, as well as airmen conducting cyber operations, securing lines of communication, providing critical medical and humanitarian aid, and enabling post-conflict reconstruction likely will prove to be of equal and perhaps greater significance in representing airpower's contribution to national security. This shift serves to fundamentally invalidate the Cold War era industrial security and resource protection models which previously governed the USAF SF and their predecessors. Obsolete concepts such as Protection Levels, Force Protection Conditions, and Postulated Threats are ineffective in proactively ensuring security and will become completely irrelevant in the FOE. Moreover, these concepts may actually serve to degrade the USAF SF's ability to provide protection because their compliancebased proscriptions provide a false sense of security which removes the impetus for commanders at all levels to anticipate the effects-based actions of the USAF's likely adversaries in the FOE. Success in the future will require airpower advocates and their tactical security forces to preempt enemy activity before threats materialize and rapidly to detect and defeat threats which have emerged. In short, airpower security efforts must be threat-based vice compliance-based.

The RAF's doctrinal publication AP 3000, *British Airpower Doctrine*, surmises this environment in the following manner:

The fundamental requirement to protect deployed forces has, therefore, developed from the physical protection of aircraft and airfields in what was termed Combat Service Support, to encompass protection of people and information, widening the concept into the term Force Protection. The passive threat could be covert observation and reporting. Active threats may employ stand-off techniques such as target designation, Surface to Air Missile attacks, missile attacks against soft and vulnerable targets and mortar or heavy calibre sniper attack. The offensive threat could be further complicated by the proliferation of ballistic and cruise missiles, and chemical or biological agents. There could also be a threat from

indigenous or third party extremists, ranging from terrorist action (politically or criminally motivated) to civil disturbance. (RAF 1999, 1-2)

AP 3000 further proposes that the means to deliver these threats to airpower and air bases will arise from hostile surveillance and reconnaissance, as well as attack via air, ground, information and CBRN means (RAF 1999, 4). The potential targets of these sources include: "aircrew, aircraft, main operating surfaces, fuel installations, munitions areas, logistics areas, command and control centers, navigation, sensor and communications sites, and personnel accommodation" (RAF 1999, 3). In essence, future adversaries conducting asymmetric avoidance behavior will employ the least amount of resources necessary to attack perceived friendly single points of failure, the incapacitation of which will produce the greatest effect towards achieving the enemy's strategic and operational goals. For example, an enemy need not destroy every combat aircraft on an air base to disrupt friendly air activity. Instead he may simply to choose to attack the base's liquid oxygen plant, the loss of which would ground those aircraft requiring it, creating the desired effect.

Adversarial activity in the FOE will be enabled by the ease with which advanced weaponry may be acquired, transported, and employed. In response, friendly security forces, as a matter of routine practice, must be organized, trained, and equipped to counter a diverse range of enemy systems, which fall into several general categories:

(1) Improvised Explosive Devices, (2) Man Portable Air Defense Systems (MANPADS), (3) Anti-Armor Weapons, (4) Anti-Materiel/Personnel Rifles, (5) Thermobaric Weapons, and (6) Indirect Fire Systems (Rocket, Artillery, Mortar) (Australian Army 2005, 17).

Each of the aforementioned systems is portable, concealable, simple and effective, a precarious combination for ABD forces. Improvised explosive devices come in many forms, and can be used to attack entry control points, assembly areas, and security patrols. MANPADS, such as the easily acquirable SA-7 and more dangerous SA-16 and SA-18, threaten aircraft flying low and slow in the approach and departure vectors surrounding an air base. Anti-armor weapons, such as the Rocket Propelled Grenade-29, are lightweight, concealable, and effective against structures, vehicles, and aircraft from a range of 800 meters (Australian Army 2005, 17). Anti-materiel/personnel rifles provide highly accurate fire at great ranges to assassinate key personnel and destroy equipment (Australian Army 2005, 17). Thermobaric weaponry increase the heat effect and blast pressure of conventional explosives, compounding their effectiveness within confined spaces and structures (Australian Army 2005, 17). IDF systems permit the enemy to continually disrupt friendly operations with harassment and interdiction fire. The increasing employment of these systems requires organic security forces to achieve local area dominance, to communicate effectively with air assets, to possess the organic fires necessary to rapidly defeat hostile systems, to employ robust Command, Control, Communications, Computers, Intelligence, Surveillance, Reconnaissance (C4ISR) capabilities to gain and maintain situational understanding, and to execute offensive and defensive operations which are threat-based.

Doctrinally and organizationally, Germany's Objektschutzregiment der Luftwaffe adheres to a full-spectrum approach in defending against a range of possible threats including "asymmetric and irregular combatants, as well as armored, airborne, and amphibious forces" (Luftwaffe 2005, Appendix 2-1). ABD forces must be capable of

protecting fixed bases and mobile assets (MANPADS suppression) anywhere within an operational area, including in complex environments such as urban terrain (Luftwaffe 2005, Appendix 2-1). There are two contemporary means to achieving this effect. In its Air Power Manual, the RAAF introduces these means by stating that "[p]rotecting the large areas covered by air bases requires either large static forces or smaller mobile forces supported by persistent surveillance and information systems to detect and identify threats in time to deploy defensive measures" (RAAF 2007a, 135). In the FOE, the smaller mobile forces introduced above will become commonplace. Increasing expeditionary operations and higher personnel costs will render providing an equal level of security to all resources economically and operationally impractical. The large, static forces introduced above are too expensive to develop, too predictable tactically, and too slow and cost-prohibitive to deploy. Thus, these forces are too prone to defeat by the emerging threats of the future. In essence, ABD forces attempting to defend against everything and everyone will result in defending nothing.

Future adversaries pursuing an asymmetric advantage against a coalition constituted of the air forces being analyzed will be forced to attack airpower when it is perceived to be most vulnerable, with methods that are unconventional, and weaponry designed to maximize the incapacitation of coalition airpower. In essence, these enemies will be executing an effects-based approach to operations. This burgeoning reality has inspired airmen to develop new approaches to Protection, as a joint function, and what it will take to protect the core competency of airpower against future adversaries. These approaches solidify the conclusions of increasing threat complexity, diversity, diffusion, and lethality within the FOE. ABD forces, in response, must continually assess the

nature of the threats to airpower, in all its forms, and take actions that are threat-based, vice policy driven.

<u>Desired Effects/Capabilities of Field Grade</u> USAF SF Officers

Countering the perceived threats to airpower in the FOE, as well as successfully realizing the significant transformation underway within the USAF SF, will be contingent upon continual advanced development of the USAF SF mid-level officer corps. The threats to airpower introduced within this analysis, as well as the increasingly expeditionary nature of air operations, and the proactive defensive posture required for effective ABD operations, require future SF FGOs to be capable of generating certain enhanced effects. These effects and capabilities should be considered within the context of the USAF SF's established METs: (1) Tactical C4ISR; (2) Threat Intercept; and (3) Force Application (USAF 2006, 13-14).

Tactical C4ISR involves activities required to "plan, direct forces and collect, collaborate and fuse information . . . to support the surface fight and maintain situational awareness" (USAF 2006, 13-14). Within the FOE, accomplishing this MET will require an SF FGO corps capable of the following: Practicing Operational Art; Mission Command; Intelligence Preparation of the Operational Environment; Pervasive Information Operations; Network-Centric Warfare; and maximizing Joint, Interagency, Intergovernmental and Multinational interoperability.

Ongoing USAF SF transformation from a static compliance-based force to an expeditionary capabilities-based force undoubtedly will result in an increased capability of defeating future threats; fully realizing this objective requires the development and

empowerment of operational artists who can design and lead complex operations in new and unconventional ways. Developing this capability universally ensures that staff officers as well as those in the field have a common understanding and competency in the precepts of operational planning, and prepare friendly actions that are designed to counter enemy activity as opposed to satisfying regulatory industrial security approaches.

Additionally, educating officers in processes such as the Integrated Defense Risk Management Process, the US Army's Military Decision Making Process, the Joint Air Operations Planning Process, and the NATO Joint Operational Planning Process enables these leaders to fully support operational planning efforts at all echelons and ensures that the security of airpower is fully planned for as well as executed by airmen. Executing ABD operations within the FOE will also require the adoption of a decentralized command architecture: Mission Command.

Mission Command can best be characterized by decentralized command systems, which place great emphasis on seizing and exploiting initiative through freedom of action at the unit level. In executing Mission Command, commanders of ABD forces use their freedom of action to independently generate effects which support an established commander's intent. The USAF SF faces two primary challenges in adopting this style of command. First, decentralizing command runs, conceptually, counter to the airpower precept of centralized control and decentralized execution. Secondly, the USAF SF's nuclear weapons security mission, as a focus area, has historically lent itself to execution of mission command's antithesis, detailed command. These challenges must be overcome for SF FGOs to effectively defend airpower in the FOE.

Centralized control and decentralized execution bears great merit in the synchronization and orchestration of airpower assets at the theater level. It is, however, a precarious preposition for tactical forces conducting ground combat operations. These forces must be synchronized with and mutually support the "battlespace owner" in their particular area of operations. As air bases are maneuver elements in their own right, this individual may very well be an airman, but he must undoubtedly be present locally and not reside at the theater level.

An example of the danger of exercising centralized control and decentralized execution with tactical ABD forces is portrayed in the experiences of the 407th Expeditionary Security Forces Squadron (SFS), defending Ali Air Base in 2005. Ali Air Base is situated southwest of An Nasiriyah, Iraq, and in 2005 was within the operational area of an Italian Army Brigade responsible for executing stability operations within Iraq's Dhi Qar Province. As such, the 407th Expeditionary SFS had to integrate its ABD operations with the activities of the Italian battlespace owner to affect the security of the airpower assets and coalition personnel on Ali. The result of this coordination was a common operating picture which established a mutually supporting base cluster defense incorporating the 407th Expeditionary SFS with elements of the Italian-Romanian Joint Task Force to their East, and elements of the US Army to their North.

However, operational control of the 407th Expeditionary SFS and its parent unit the 407th Air Expeditionary Group, in keeping with USAF doctrine, was retained by the 332nd Air Expeditionary Wing at Balad Air Base, a distance of approximately 200 miles from Ali and well outside of the operational area. When the 332nd Air Expeditionary Wing's commander attempted to amend the 407th Expeditionary SFS contribution to the

aforementioned base cluster defense, the Italian commander rightfully objected, wondering why a USAF officer 200 miles from his operational area was trying to drive the maneuver of forces in his battle space.

This example highlights the suboptimal nature of centralized control and decentralized execution when applied to tactical ABD forces, operating within the land component's operational area. These forces must conduct bottom-up planning and integrate, operationally, with other ground combat elements. They can be managed centrally only through the use of a regimental system which permits commanders in the field to flexibly seek those arrangements which will achieve the desired effect for the air combat elements they are charged to defend.

Detailed command as practiced within the nuclear security arena has resulted in archaic regulations which prescribe exactly how many personnel will respond to certain incidents, what the response time will be, and how they will be equipped. Not only are these methods inefficient and ineffective in ensuring resource protection, they run counter to the effects-based approach crucial to the successful execution of air operations. In providing close air support, the USAF requires the supported ground combat force to identify the "effects" it desires, as opposed to identifying the desired weapon systems and ordnance, and retains control of how it will deliver those effects. This same principle must apply to nuclear weapons security within the FOE. In essence, USAF SF commanders tasked with this mission should be told to achieve specific effects (e.g. detect, deny, defeat) within fixed times, and retain the particular tactical response which will support these effects.

Successful execution of mission command in the FOE will require successful Intelligence Preparation of the Operational Environment. This heightened level of analysis provides commanders the situational understanding necessary to synchronize shaping and decisive operations, target hostile forces, and mitigate the influence of the physical environment and the enemy on friendly operations. Yet this capability cannot simply be a product that intelligence specialists provide ABD leaders. SF FGOs themselves must be trained to develop the priority intelligence requirements and commander's critical information requirements that will enable them to achieve area dominance and conduct pervasive information operations. As such, an innate understanding of Human, Signals, Imagery, Measurement and Signatures, and Counter-Intelligence operations is integral to successful ABD (USAF 2008, 14).

It is quite likely that the complexity of the FOE will lead to ABD operations conducted amongst populations which are susceptible to influence, exploitation, and coercion by hostile elements. Preventing this vulnerability from materializing requires ABD forces to shape the diverse populations within close proximity of air bases so that they view their own security as linked to the success of friendly forces and, thereby, render the operational area inhospitable to the enemy (Kubiak 2007). The primary means to achieving this effect is the execution of pervasive Information Operations. Through an understanding and appreciation of the cultural ethos, linguistic styles, and history of various conflict regions ABD forces can design operations which ensure security for the civilian populace, promote regional stability, and facilitate post-conflict reconciliation.

As ABD forces increase their operational reach within external base security zones they

must be prepared to adopt these and other land owner responsibilities. In this context, their reach will be a factor of their capacity to conduct network-centric warfare.

Network-centric warfare presents ABD forces with the technical ability to project power, gain and maintain situational awareness, and prevent fratricide amongst the various forces likely to operate within close proximity to aerial ports. For SF FGOs, this desired capability involves enhancing defensive operations through the integration of contemporary and emerging capabilities such as target acquisition radars, small unmanned aerial systems, remotely operated video enhanced receivers, tactical sensors, mobile tracking systems, electronic counter measures, and advanced communications.

These network-centric systems will not only enhance situational awareness during ABD operations, but, as force multipliers, will allow commanders to extend their span of control and influence throughout a BSZ. Furthermore, interoperability between these systems and those employed by other ground combat forces within an operational area enables defenders, as well as those operating on their flanks to prevent fratricide and provide each other with mutually support fires. This level of detailed integration will be essential to Joint, Interagency, Intergovernmental and Multinational operations in the FOE.

Contemporary military operations demonstrate the USAF SF's capacity to achieve significant operational synchronization with other forces in the conduct of security operations. For ABD forces in the FOE the heightening joint nature of combat will manifest itself in the need for greater operational and organizational integration, an elevation of the synchronization currently realized.

An "interoperability in air base protection may reduce or remove the requirement to deploy organic protective capability" and thereby maximize the use of the low density ABD resources a coalition can muster (RAAF 2007a, 135). Operationally, SF FGOs must be prepared to secure friendly, non-USAF, airpower assets and, accept that non-USAF ABD forces may, in turn, secure USAF resources. For example, a USAF SFS tasked to defend an expeditionary airfield should provide the same degree of defensive commitment to the British airpower assets and personnel located there as they do to their own resources. Similarly, a USAF decision to deploy combat aircraft to an expeditionary airfield defended by elements of Germany's Objektschutzregiment der Luftwaffe should not drive a redundant requirement for a USAF SFS to deploy for the defense of these resources. Developing and implementing mutually agreed upon defensive protocols is essential to achieving this degree of interoperability. Failure to achieve this degree of operational integration will needlessly waste valuable manpower and may serve to breed mistrust amongst the members of a coalition.

A vision of how this degree of organizational interoperability might be achieved can be seen in the activities of the international Military Police (MP) community. The MP community has coalesced in the form of the NATO MP Panel, a forum which brings together the army MP organizations from all 26 NATO nations, ensuring unity of effort, technical interoperability, and common understanding as to the capabilities and limitations of each nation's force. The hallmark of this synthesis is the panel's drafting and implementation of an Allied Joint Plan which standardized operations and mission areas for NATO MP Forces. As a result of this effort, the MP community is no longer viewed within NATO as a solely national entity. It is a unique capability which a joint

commander may employ as needed to achieve desired effects. For example, as opposed to each nation deploying its own MPs for internal security and law enforcement, a joint commander may conclude that he has an area security problem, and determine that MPs are the optimal force to tackle this challenge, since it is one of their NATO established core missions. These MPs could come from any nation since they all adhere to the same operational standard. It is entirely possible for the various ABD forces in NATO and the Air and Space Interoperability Council to achieve the same level of interoperability. Indeed, these coalitions' mutual success in the future will depend on their ability to do so.

Tactical C4ISR, as an ABD mission essential task, necessitates the development of FGOs who are operational artists, exercise mission command, conduct robust Intelligence Preparation of the Operational Environment, shape their operational areas with pervasive Information Operations, exploit the advantages of network-centric warfare, and maximize coalition interoperability. These capabilities are essential to their ability to intercept threats to airpower.

From an ABD perspective, the Threat Intercept MET is defined as the ability to "detect threats and tactically maneuver along internal lines to intercept unknown or hostile forces" (USAF 2006, 14). As such, ABD forces shifting from large, static postures to the smaller, more capable forces of the FOE must place a premium on mobility, operational responsiveness, and survivability. Attaining this end entails developing the following capabilities within the SF FGO corps: (1) airborne and air assault operations; (2) BSZ operations; (3) air base operations security/internal circulation control; (4) and counter-rocket, artillery, mortar operations.

The speed and flexibility afforded by an airborne and air assault capability and its ability to circumvent and minimize the effect of terrain on friendly operations, will be essential to the mobile ABD forces operating in the FOE. Primarily, these capabilities will enhance the air component's contribution during major combat operations by filling the seam between airfield seizure and opening and, thereby, freeing the land component to continue offensive operations unburdened by the need to secure an aerial port. Within the FOE, an airborne capable ABD force will permit the USAF to conduct airfield seizure operations independent of the army, a contingency which the RAF Regiment, Commandos de l'Air, and Objektschutzregiment are already prepared to execute. Additionally, an airborne and air assault capability will allow the smaller, more mobile ABD forces of the future to exploit the element of surprise during raids, sweeps, and other targeted operations, as well as achieve the informational effect that this force can be anywhere within the operational area, at any time, without tactical warning. A secondary application of airborne and air assault operations is demonstrated within the nuclear weapons security mission area. In this practice, the mobility afforded by air assault operations increases the situational awareness, responsiveness, and effectiveness of ABD forces.

In the FOE, the increasing capacity of hostile forces to breach complex physical defenses and threaten strategic resources necessitates that air assault operations constitute the primary tactic with which to guarantee resource protection. In essence, USAF SF personnel securing strategic resources in the FOE will be most effective in the form of a quick reaction force, in an alert status on an air assault asset, than as a force which responds to alarm activations with motorized transport. An air mobile security force

requires significant resources for the increased lift assets it employs, but these costs may be realized in the efficiency gained by employing a smaller, more mobile, and more capable force.

In response to the asymmetric avoidance behavior of potential adversaries, ABD forces must intercept threats as far as possible from airpower assets, in the previously described BSZ. This task requires the interdiction of enemy personnel, weapons, and resources as well as the disruption of enemy surveillance, reconnaissance, and targeting. The necessity of interdiction is emphasized by the observation that "there is only one way to stop a determined enemy from attacking a base; you have to kill or capture him and take his weapons" (Holmes, et al. 2006, 43).

An ABD force's capability to successfully interdict a hostile force in a complex FOE will rest on the ability to generate accurate all-source intelligence and exploit this information, operationally, with mobility or presence. SF FGOs must, therefore, be capable of planning and leading mounted operations in unrestricted terrain and dismounted operations in all forms of terrain. This activity will generally consist of reconnaissance/movement to contact operations, but may also involve insertion of CPE teams, the establishment of patrol bases, observation positions, strong points, and the conduct of presence patrols. Randomly and unpredictably engaging in these undertakings, in concert with operations resulting from the intelligence they provide, disrupts enemy maneuver and lessen the probability of hostile action. Aggressive offensive and defensive actions within the BSZ, thus, serve as the most vital element of a defense in depth strategy.

ABD actions within an air base are also critical to the security of airpower. While large penetrating attacks against air bases are less likely, the possibility of an internal threat utilizing improvised explosive devices and other unconventional means strengthens the need to develop and execute access and internal circulation control measures, battle drills, and final protective fires which mitigate the effects of enemy activity on friendly operations. Consequently, SF FGOs must take a lead role in Integrated Defense planning, risk management, and post-attack recovery efforts.

In the FOE, it is plausible that enemy activity may occur with little to no tactical warning. In these instances, ABD forces must be capable of surviving initial contact with the enemy, minimizing the effect of enemy action on friendly airpower generation, and retaking the initiative. While engineering will be crucial for the defense of fixed positions and key facilities, such as entry control points and command posts, survivability for ABD forces will more often be a factor of unit mobility, unpredictability, and the capacity to interdict enemy fires. Aggressive BSZ operations can serve to create this effect by forcing the enemy to fire from locations and ranges which render his fire ineffective. However, should this fire present a threat to airpower, SF FGOs must be capable of incorporating Counter-Rocket, Artillery, and Mortar systems into defensive fire planning.

Threat interception is the key link between robust C4ISR and the ability to apply force against designated targets. SF FGOs, leading small, mobile ABD forces must seize the initiative from the enemy, interdicting his materiel, disrupting his activity, and minimizing the effectiveness of his attacks. Aggressive actions within the BSZ,

supported by proactive internal security, will achieve this effect and enable the application of force against the enemy.

Force application, from an ABD perspective, involves the use of "lethal and non-lethal force, fires and effects" (USAF 2006, 14). SF FGOs must be capable of applying these tools offensively and defensively. This need necessitates refining several enduring capabilities and inculcating certain additional skills for effectiveness in the FOE. Those enduring competencies include the capacity to orchestrate complex defensive fire plans, which incorporate organic fires, target reference points and engagement areas that are deconflicted with friendly air operations. In addition, the capacity to establish priorities of fire and associate designated fire effects with appropriate named and targeted areas of interest will continue to be essential. Finally, SF FGOs must build upon these established requirements with emerging skills such as those associated with joint fires observation and terminal attack, CPE operations (Sharpshooter Employment Officer), remotely operated systems, and non-lethal applications.

Force application in the BSZ, the result of robust tactical C4ISR and threat interception, will largely take the form of offensive operations targeting enemy capabilities and defensive operations which mitigate their capacity to attack airpower. Accordingly, ABD forces in the FOE will increasingly engage in preemptive operations such as raids, ambushes, and cordon sweeps. These operations will require the development of SF FGOs who are weapons experts and can issue detailed fire control orders while integrating sectors of fire to prevent collateral damage and fratricide.

Additionally, SF FGOs operating with the small, mobile forces expected in the FOE must be capable of increased fire effects with diminished manpower. Their primary

tool to achieve that end is the redevelopment and employment of organic indirect fire assets. In the FOE these assets will be vital not only to disrupt and destroy enemy forces, but to protect friendly personnel operating within the BSZ.

In cases where the application of organic indirect fires is suboptimal for the operating environment, SF FGOs must rely on the delivery of joint fires. While this effect may be reached through the assignment of joint terminal attack controllers to SF squadrons it is unlikely that ABD forces may have access to these low density resources in all conflicts. Consequently, SF FGOs should be minimally certified as Joint Fires Observers to ensure they can bring effective fire to bear in the FOE.

Tomorrow's full spectrum environment challenges ABD forces to apply force in a manner that is targeted, minimizes the risk of collateral damage to civilian infrastructure, and escalates to ensure the minimum amount of force is applied to achieve the desired effect. These constraints will be commonplace in an operating environment which is much too dynamic to permit standard rules of engagement and excessive force.

Operations in this environment must be threat-based and measured. Several new and emerging capabilities deliver these effects: CPE teams, Common Remotely Operated Weapons Stations, and the Active Denial System.

The benefit of skilled CPE teams in protecting airpower cannot be overstated. An exceptional force multiplier, this capability can be employed to conduct reconnaissance and, due to their training in counter-sniper operations, are the optimal tool to counter the identified threat of anti-personnel/materiel rifle employment against friendly forces.

Common Remotely Operated Weapons Stations provide ABD forces with a tool to rapidly engage hostile forces whose presence has been identified with surveillance

equipment, target acquisition radars, and other sensor systems. A network-centric capability, CROWS could be synchronized with target acquisition radars to enable a weapons operator within a Base Defense Operations Center to delay targets with suppressive fire, providing crucial time for ABD forces responding to the threat.

While CPE and Common Remotely Operated Weapons Stations focus on kinetic weapons and lethal effects, the Active Denial System represents a non-lethal tool to deter enemy activity. A directed energy system, it projects high-frequency microwave radiation and is highly effective in enforcing stand-off distances, maintaining clear zones around key terrain, and dispersing massed forces.

CPE, Common Remotely Operated Weapons Stations, and the Active Denial System are representative of emerging technologies which offer great promise for enhanced effectiveness in ABD operations. In contemplating the future, ABD forces must seek out these emerging technologies and master their employment to multiply the effect of their limited manpower and project combat power.

Robust C4ISR and threat interception alone will be insufficient to protect airpower. Adoption of proactive defensive postures which preempt enemy activity and render a BSZ inhospitable to the enemy must enjoy the support of effective firepower. As such, the refinement of enduring requirements is necessary for SF FGOs in the FOE, but these skills must be enhanced with emerging capabilities which enable the measured application of force.

The USAF SF's METs provide key indicators of the general skill sets FGOs will need to successfully defend airpower in the FOE. Tactical C4ISR provides the necessary tools to plan, execute, and lead ABD operations in complex operational environments.

Threat interception exploits the situational understanding gained for C4ISR and facilitates the detection and disruption of enemy forces. Finally, force application defeats these threats and ensures airpower is uninterrupted by enemy activity. Accomplishing these tasks in a FOE effected to an increasing degree by globalization and its effects against adversaries employing asymmetric avoidance behavior will require SF FGOs with unique capabilities. Developing officers who can achieve these effects is integral to an ABD force's ability to secure airpower in the FOE.

<u>Introduction to Foreign Air Base Defense Forces</u>

An appropriate understanding of the FOE, the threats it presents to airpower, and, subsequently, the skills FGOs will require in defeating these threats, facilitates a comparative analysis of how certain ABD forces produce and develop their officers. This analysis must take particular account of each force's unique organization and training, as well as the effect of these elements on officer development. In essence, officer development within these forces must be viewed holistically, and measured with respect to the ability to achieve the desired effect, preparing officers to lead and execute ABD operations in complex, diverse, diffuse, and highly lethal FOE. To that end, this analysis will first provide an introduction to the four selected foreign air base defense forces. Subsequently, it will present the means by which officers are developed in these forces and identify areas of convergence amongst these case studies.

Royal Air Force Regiment

Great Britain's RAF Regiment is an experienced and historically effective air base defense force. Organized, trained, and equipped as a light infantry regiment, the

RAF Regiment is unique amongst British ground combat units in that its members are trained to be "air aware" and focused to combat the full spectrum of threats to airpower in all operational environments.

The United Kingdom recognized early in the evolution of airpower the military significance of gaining, maintaining, and exploiting air superiority. This recognition resulted in the RAF's establishment as the world's first independent air force. Similarly, the British first realized the criticality of securing airpower with organic ground combat forces. British leaders conceived the RAF Regiment in the aftermath of the German attack against British forces on Crete during World War II, when German airborne forces overran British ground defenses and seized airfields for future offensive operations. Similar losses to Japanese forces occurred in the Pacific theater of operations. Reflecting on their strategic effect, Winston Churchill remarked, "Every airfield should be a stronghold of fighting air-groundmen, and not the abode of uniformed civilians in the prime of life protected by detachments of soldiers. It must be clearly understood by all ranks that they are expected to fight and die in the defence of their airfields" (RAF 1999, 1). This realization provided the impetus to form the RAF Regiment. Since its inception, the regiment has contributed significantly to the combat power of the United Kingdom, in general, and the RAF, in particular, participating in all of Britain's major combat operations.

At its core the RAF Regiment is an infantry regiment which exercises centralized command and control of those forces specifically designed to protect the RAF.

Currently, it is composed of eight active and three auxiliary field squadrons, as well as one active and one auxiliary CBRN squadron. Each field squadron executes an

expeditionary ground defense mission in support of the RAF. Furthermore, one of these squadrons possesses an airborne assault capability, facilitating airfield seizure operations and enabling tactical mobility (RAF 2004, 4). The two CBRN squadrons represent the RAF component of Britain's joint nuclear, biological, and chemical defense regiment. Additionally, the RAF Regiment trains the members of the RAF in personal CBRN defense and expeditionary ground combat skills, conducts personnel recovery operations, and provides support to tactical air control parties and Special Forces.

Concentrating these mission areas within the regiment allows the RAF to ensure unity of effort within the Protection functional area and economically utilize limited personnel and materiel. Moreover, the regiment demonstrates the RAF's dedication to organizing and manning forces primarily for combat rather than peacetime, a departure from the USAF's historical preference to utilize peacetime organizational and manpower models and then "surge" for contingency operations.

Fusiliers Commandos de l'Air

The French Air Force (*Armée de l'Air*) first recognized the need for organic ground combat forces in 1955, while conducting counterinsurgency operations in Algeria. Accordingly, this formative experience in low-intensity conflict cemented the Commandos de l'Air's institutional knowledge in point defense against guerrilla forces. Currently, the commandos are organized into 33 Protection Squadrons (*Escadrons de Protection*) and 3 Intervention Units (*Unités d' Intervention*), along with associated educational and training units, under the command and control of the BAFSI.

In the French organizational construct, an Air Brigade represents a functional division of the Air Force. As such the BAFSI is the organizational equal of the *Brigade Aérienne de l'Aviation de Chasse* (Fighter/Pursuit Aviation), the *Brigade Aérienne d'Appui et de Projection* (Transportation and Mobility Forces), and the *Brigade Aérienne du Controle de l'Espace* (Airspace Control). Similar to the RAF model introduced earlier, this organizational construct enables the French Air Force to achieve great unity of effort within specific functional areas, focus on wartime mission planning, and standardize the organization, training, and equipping of their limited military forces.

In support of the Protection functional area, the Commandos conduct air base defense, nuclear weapon security, counter-terrorism, and counter-narcotics operations. These missions and capabilities are further enhanced by the Airborne Air Commandos (Commandos Parachutiste de l'Air), comprising the aforementioned Intervention Squadrons, who perform Combat Search and Rescue (Recherche et Sauvetage au Combat), terminal attack, and other special operations roles. This relationship is akin to designating and training all USAF ground combat airmen as SF, and subsequently developing selected groups of SF for pararescue, combat control, and joint terminal attack missions.

Similar to the British example, the French have integrated several unique elements of the Protection function into the same organizational construct: air base defense, CBRN, and fire defense, all of which are complementary tasks necessary for the maintenance of combat power. CBRN and fire defense are the mission areas of the French Air Force Firefighters (*Pompiers de l'Air*) who are integrated organizationally with the Commandos de l'Air at the Air Brigade level. This consolidation advances the

efficient execution, doctrinally, of the Armée de l'Air's four ABD supporting functions: (1) prevention, (2) passive defense, (3) active defense, and (4) reactive measures (Gourg, Stephane 2008, 45).

Royal Australian Air Force Airfield Defence Guards

The Airfield Defence Guards conduct ground defense operations in support of the RAAF. These duties entail ABD, as well as CBRN defense, explosive ordnance disposal, and training the members of the RAAF in ground defense operations. The RAAF's Airfield Defence Squadrons are organizationally controlled by the 395th Combat Support Wing of the RAAF's Combat Support Group.

The RAAF first employed organic security forces in 1942, when Australia was a member of the British Commonwealth. Though the RAAF considered forming an Airfield Defence Guard mustering several years earlier, the impetus for developing this capability did not exist until the bombing of Darwin by Japanese Imperial forces. Airfield Defence Squadrons formed shortly thereafter to defend Australian and allied airfields, enable the seizure and defense of expeditionary airfields, and facilitate the training of RAAF members in ground combat skills (Kainikara and Richardson 2008, 28).

The Airfield Defence Guards' operational exposure to, and integration with, the USAF SF (formerly Security Police) began during the Vietnam War. Airfield Defence Guards deployed to Phan Rang Air Base, Republic of Vietnam, and Royal Thai Air Force Base Udorn for the defense of RAAF assets operating from these locations. During this conflict they conducted aggressive defensive operations, focused on the denial of standoff

weapons attacks on the airfields charged to their defense (Kainikara and Richardson 2008, 28).

Between the end of the Vietnam War and the RAAF deployment in support of Operations Iraqi Freedom and Enduring Freedom the Airfield Defence Guards deployed on several low-intensity conflicts which grounded and focused their combat experience on the conduct of stability operations. The most noteworthy of these deployments were Operations Warden and Anode, the peacekeeping operations in East Timor and the Solomon Islands, respectively. These operations served to reinforce the RAAF's competency in stability operations and counterinsurgency warfare.

Objektschutzregiment der Luftwaffe

Air base defense in the German Luftwaffe is the purview of the *Objektschutzregiment der Luftwaffe* (Force Protection Regiment of the Air Force). This organization is the youngest of those being analyzed in this study, which lends it a considerable theoretical advantage relative to the other forces being analyzed, including the USAF SF. This advantage is simply that this organization is not constrained by historical, cultural, and bureaucratic factors which hamper the effective and efficient use of limited resources in an era of increased threat. As a result, the Germans have been able to optimally streamline all forces conducting missions supporting the Protection function under a single regiment, enabling the effective training and employment of these forces against contemporary threats (Kubiak 2007).

The Luftwaffe's concept of ABD has evolved considerably in recent history. As recently as 10 years ago, no German airmen were specifically designed for this mission,

which was normally executed by an assortment of various personnel at each operational air wing (*geschwader*). Furthermore, no centralized organization existed to manage personnel or resources assigned to this task or to other missions associated with the protection function. In the past decade, necessity has transformed the Luftwaffe into an expeditionary force capable of supporting Germany's NATO obligations. This transformation, along with increased domestic terrorist threats, prompted the Luftwaffe to form effective ABD forces and formally to order the formation of the *Objektschutzregiment* as an independent organization on 31 October 2005 (Luftwaffe 2005). Since then this regiment has contributed to NATO operations in Afghanistan and Kosovo, and peacekeeping operations in Africa.

The Objektschutzregiment's doctrine, organization, training, materiel, leadership, personnel, and facilities are cemented in the *Einsatzkonzept Objektschutz in der Luftwaffe* (Force Protection Concept of Operations). Organizationally, the regiment represents a consolidation of forces committed to the Protection function, consisting of two active battalions and one inactive battalion conducting infantry-oriented force protection (*infanteristicher objektschutz*). A fourth battalion specializes in the various other protection missions, such as: air defense, explosive ordnance disposal, CBRN defense, fire defense, and engineering (Luftwaffe 2005, Appendix 2-1). Combining these capabilities within the same regiment enables the integration of both active and passive defensive operations to secure airpower. This organizational structure also enables the centralized execution of the protection function, as this unit reports directly to the Luftwaffe's operational leadership, via the 4th Air Division, as opposed to being parceled out to operational units (Deutsche Bundeswehr 2006, 94). Perhaps most significant to the

purpose of this study, the integration of all protection forces within the

Ojektschutzregiment enables the Luftwaffe to operate independently of the German

Army, as the regiment is expected to defeat all threats to airpower, including those posed by enemy aircraft and armored forces.

Foreign ABD Force Officer Development Processes

The path to officership within Britain's RAF Regiment is demanding and extremely selective. Candidates begin this path with the Potential Regiment Officer's Acquaintance Course, a physically and mentally grueling trial which determines whether an individual possesses the leadership skills, mental agility, physical fitness, and intestinal fortitude required to advance to the Junior Regiment Officer's Course. Selection for this initial qualification course is hardly assured, but those officers who demonstrate the capacity to lead "gunners" in the field may advance to this arduous 37 week long program. The Junior Regiment Officer's Course is not solely a training program but also a certification venue which aims to ensure that only officers of the highest caliber are released into the field. In essence, due to its hybrid nature, this program bears a stronger resemblance, conceptually, to the US Army's Ranger school than a basic officer course. Following graduation and dependent upon unit assignment, RAF Regiment officers may receive further tactical training in flight command; forward air control operations; jungle, desert, and arctic warfare courses; and airborne operations.

It must be noted that an RAF Regiment officer will not be posted to a leadership position within a field squadron until he has completed the Junior Regiment Officer's Course. In essence, there are no officers occupying manpower authorizations on "casual

status" in the regiment's field squadrons. The importance of this policy cannot be overstated. It prevents the occupation of a posting by an individual who may not possess the ability to serve as a RAF Regiment officer and it heightens the credibility of the officer corps by only presenting to the enlisted personnel officers who are fully certified as operationally competent.

Currently, the RAF Regiment does not conduct any formal advanced officer training, outside of that afforded to RAF officers in general. On the surface, it would be simple to conclude that the absence of an advanced officer course implies that the regiment does not fully develop its FGO corps, but this conclusion would be highly misleading and improperly account for the effect a regimental system has on officer development. The regiment's focus on air base defense and CBRN operations concentrates its officer development on a focused mission area: protection. Furthermore, its command and control structure standardizes its officer development, advancement, training opportunities, and career progression practices. In essence, the RAF Regiment's organizational structure has a normative effect on officer development, in which an officer's every assignment is designed to develop and prepare him for advancement into the next position within the organization.

A similar trend is seen regarding the officers assigned to the German Luftwaffe's Objektschutregiment with some notable distinctions. As Germany mandates national service for all males, officers within this regiment begin their military careers as enlisted men and are competitively selected for commissioned service. Thus, it is not uncommon for junior officers in this unit to possess a high degree of military experience before their

initial officer development. This solid foundation has the effect of shortening the training time required to produce officers capable of commanding troops in combat.

An emphasis in that initial training is the execution of joint operations, an effect achieved via location and common core skills training. Specific training for the regiment's officer corps is provided by the German Army's Infantry School (*Infanterieschule*) and commences with an intensive 61 training day immersion in ground combat operations in all operational environments. This course, a requirement for all officers, prepares platoon leaders (*Zugführer*) for operational employment. Training with the Army ensures three things: interoperability, recognition, and common standards, tactically and doctrinally.

A common foundation linking the ground combat elements of the German Army (*Heer*) and the Luftwaffe serves to facilitate joint operations because formations, equipment, and doctrinal principles are uniform amongst both services. A platoon in the Luftwaffe, for example, is identical to one in the Heer. Similarly, the Objektschutzregiment is tied into the Heer's "Infantryman of the Future" combat development efforts (*Infanterist der Zukunft*), a relationship that will bear fruit in the form of interoperable communications, weaponry, ammunition, uniforms, and other combat equipment (Luftwaffe 2005, Appendix 2-2). Furthermore, doctrine, as a product of lessons learned, is a continuously evolving product. In Germany, the Infanterieschule serves as the doctrinal hub which manages the analysis and production of doctrine. Training there allows the Objektschutzregiment to ensure the tactics it employs are, doctrinally, synchronized with those of the Heer. Finally, consolidating training venues prevents duplication of effort between the services and maximizes the efficient use of

limited manpower resources. The importance of this common training on the combat effectiveness and cultural foundation of the Objektschutzregiment cannot be overstated. However, it represents only the beginning of an officer's development.

Due to the fact that the Objektschutzregiment represents a consolidation of all Protection functions (air defense, engineering, CBRN, explosive ordnance disposal, and infantry-oriented ABD), an officer will not be certified as combat ready until he has completed the specialized training driven by his particular concentration. For example, those infantry-oriented ABD officers who will exercise responsibility for the security of nuclear weapons receive specialized instruction in the unique requirements concerning the security of these strategic resources (Luftwaffe 2005, Appendix 2-6). Furthermore, as in the RAF Regiment, officers are not assigned to an operational squadron (*staffel*) in the Objektschutzregiment until they have successfully completed their formal training.

Advanced officer development is the product of two programs: Advanced Officer (Lt Col and Maj) Development in Infantry-Oriented Force Protection (*Weiterbildung für Oberstleutnante und Majore der Luftwaffe im Infanteristischen Objektschutz*) and Pre-Command Courses for squadron commanders. Advanced officer development is mandatory for all commanders and their deputies (S-3 (Operations)), and consists of 10 training days at the Infanterieschule. In practice, this course aims to instill in officers the principles of infantry-oriented protection operations at the squadron level and higher and prepare them to achieve objectives in all operational environments. Thus, this course is focused on expanding the basic knowledge an individual received as a junior officer. Understanding the advanced leadership and decision making tools this course presents

will enable these officers to orchestrate complex operations involving large subordinate elements and requiring detailed integration with other organizations.

The operational focus of the Advanced Officer course contrasts markedly with the Pre-Command course intended for all squadron commanders in the regiment. This course consists of 15 training days at the Infanterieschule and is focused on the detailed mechanics of managing squadrons. As such, officers attend these courses to prepare themselves for the administrative and bureaucratic functions they must execute as commanders. These short courses demonstrate a commitment to formal advanced officer education. Advanced officer development in the Objektschutzregiment, however, remains largely a function of the normative effect created by the organization's regimental structure.

France's Commandos de l'Air demonstrate this concept in a related, but unique way. Officers there begin the process of becoming Commandos de l'Air while they are still students at the French Air Force Academy (Ecole de l'Air) (Armée de l'Air 2008). This thorough and holistic training begins at the completion of the core curriculum required for all officers and is conducted by the Commando de l'Air Training Squadron (*Escadron de Formation Commando de l'Air*). When completed, these officers will have spent a total of 14 months in focused training preparing to lead airmen in the defense of airpower. This duration ensures officers are fully capable of effectively executing their diverse combat missions (ABD, Nuclear Weapons Security, Counter-Terrorism, Counter-Narcotics, Airfield Seizure, Intelligence Gathering, and Operational Planning) (Armée de l'Air 2007, 3).

Similar to the USAF SF, the Commandos de l'Air are in the midst of a significant organizational transformation which represents a large component of their Air Force's "Air 2010" concept. This plan entails functionally clustering all protection and ground combat operations under a single command element (BAFSI) with the objective of optimizing efficiency through interdependence between the BAFSI and its three sister Brigades (focused on pursuit aviation, air transport, and air traffic control) (Armée de l'Air 2007, 5). Thus, functional alignment in a "regimental" system (Air Brigade) is practiced by the commandos. As seen in the British and German models, this organizational structure too has a normative effect on advanced officer development.

Ground Defence Officers in the RAAF's Airfield Defence Guards experience great diversity in assignments, beginning their careers commanding rifle flights in Airfield Defence Squadrons, but subsequently executing survival, CBRN, and Combat Search and Rescue missions, as well as facilitating ground combat training for RAAF members (RAAF 2009). This broad range of possible assignment, combined with noncentralized command and control (Airfield Defence Squadrons are assigned to the 395th Combat Support Wing of the RAAF's Combat Support Group), necessitates more focused advanced officer development protocols within this specialty.

Much of this development is provided by the Australian Army and commences with 18 months at the Royal Military College (Duntroon), as opposed to the RAAF College, and 11 weeks at the Regimental Officer Basic Course (Infantry) (RAAF 2009). As seen in the Objektschutzregiment, this common foundation has distinct benefits in facilitating interoperability, understanding, and doctrinal consistency. Following this immersion in ground combat operations, officers receive specialist training in ABD at the

RAAF's Ground Defence Basic Operations Course, which applies the skills they have learned from their army towards the unique "tactical and administrative requirements of security and ground defence operations in an Air Force environment" (RAAF 2009). Thereafter, further training is provided in "explosive ordnance demolition; training management; Nuclear, Biological, and Chemical defense; fire and general safety; advanced range qualifications; tactics and weapons" (RAAF 2009). This solid grounding develops within these junior officers a high degree of proficiency, preparing them exceptionally well for their initial tour as Rifle Flight commanders.

Advanced officer development commences with the Grade 3 Junior Staff Officer Course, which trains officers in the Military Decision Making Process and prepares senior lieutenants for squadron-level staff duty. Thereafter, junior captains will attend the Combat Officer's Advanced Course (Infantry), a program similar to the US Army's branch-specific Captain's Career Course. Finally, attendance at the Intermediate Ground Defence Officer's Course prepares junior FGOs to plan and lead expeditionary ABD operations at the squadron and group levels. Many of these programs are taught by the Australian Army, furthering interoperability and operational commonality.

What this training pipeline demonstrates is the attention and commitment that must be given to advanced officer development courses in non-regimental organizations. The wide variety of possible assignments and, correspondingly, diversity in operational experience within the officer corps necessitates focused training to ensure all officers possess a uniform level of professional competency. A similar operational challenge and response is seen within the US Army.

American infantry officers are trained to a common standard at the Infantry Officer Basic Course and subsequent follow-on schools such as Airborne School, Ranger School, and the Infantry Mortar Leader Course. However, once these officers join the operational Army their experiences are influenced by the combined arms organizations in which they serve. Thus, several years into his career, an infantry officer may become "weighted" as a light, heavy (armor), airborne, or mechanized infantryman. This trend is similar to that seen in the USAF SF with officer experiences that are weighted in ABD, nuclear weapons security, and provost operations. The Army's response to this challenge is branch-specific advanced officer development. For infantry officers this training comes in the form of the Maneuver Captain's Career Course. This mandatory course consists of 21 intense weeks which enhance the orders development and operational planning capacity of all officers, in preparation for company command and staff duty at the brigade and battalion levels (US Army Infantry Center 2009). Moreover, this course serves to "re-green" these officers by instilling within them the latest doctrine and combat development efforts, as well affording senior leaders the opportunity to shape and develop these officers in a manner that best serves the Army and the nation.

A comparative analysis of these approaches to advanced officer development illustrates several areas of convergence. Foremost amongst these is the normative effect that a regimental system has on advanced officer development within an organization. Secondly, it is clear that organizations which do not adhere to this organizational construct must commit to significant advanced officer development programs in order to provide a uniform effect and ensure a competent protection capability to commanders in the field. In addition, to the greatest extent possible, ABD forces should train and

exercise with their Army brethren to facilitate common understanding, doctrinal consistency, and interoperability. Furthermore, individual components of the Protection function should be organizationally aligned, and the command and control of this functional grouping should be centrally managed. Lastly, all forces hold that assigning officers to operational units until they are fully trained and certified as operationally competent is a dangerous proposition.

Summary

Tomorrow's operating environment, characterized by globalization and increasing complexity, diversity, diffusion, and lethality, will place unique demands on SF FGOs. Complexity requires these officers to be capable of orchestrating multifaceted fullspectrum security operations in environments which reflect challenging informational, human and physical terrain. Diversity necessitates the development of FGOs who can counter asymmetric avoidance behavior and proactively defend a diminishing number of airpower assets. In response to increasing lethality, SF FGOs must be capable of enhancing mobility, survivability, and the application of joint fires. Diffusion in the FOE demands developing officers who can harness the benefits of network-centric warfare in complicated nonlinear operating areas. Responding to these conditions requires the development of mid-level officers with the innate ability to apply the tactical C4ISR, threat intercept, and force application METs in securing airpower. The selected forces compared in this chapter demonstrate unique and intriguing methods of developing these capabilities. Areas of convergence amongst their approaches facilitate the development of an advanced officer development process for the USAF SF.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Optimum Officer Development Process for the USAF Security Forces

Transformation efforts underway within the USAF SF seek to redefine organizational culture and produce a combat-focused and capabilities-based force, thereby enhancing the USAF's ability to decisively contribute to national security in an uncertain future (USAF 2009b, 7). This study has shown that these necessary and worthy objectives will not be realized without significant improvements to the force's current officer development process. The research material introduced in chapter 2, when analyzed with the methodology presented in chapter 3, has shown that the modern battlefield is evolving into a complex, diverse, diffuse, and increasingly lethal operating environment, presenting dynamic threats to expeditionary air forces. As evidenced in chapter 4, these hazards have inspired significant organizational and institutional efforts on the part of America's allies to ensure the full-spectrum security of limited air assets. While these efforts have incorporated technical innovations to enhance the tactical capacity of individual airmen, they are, moreover, defined by focused programs to develop the officers capable of meeting the challenges of tomorrow.

Interpretation of Findings

Officer development processes within the USAF SF remain comparatively stagnant. As a result, today's SF FGO corps does not provide a uniform effect to the force, and the capability of executing full spectrum combat operations is concentrated

within a small cadre of officers who have gained experience from self-development efforts, exchange programs, and the pursuit of advanced tactical training. This condition is unhealthy for the force, dangerous for the USAF, and necessitates a holistic revision of the current SF officer development process.

Analysis in chapter 4 demonstrates that this progression must incorporate two components. First, it must lay a solid foundation, consisting of a competitive officer selection process and a robust initial skills training program. Second, it must build upon this basis with advanced officer development pursuant to one of two alternative paths: (1) adoption of an organizational structure which models a regimental system, as evidenced by the British, German, and French models, or (2) significant time and resource commitment to advanced officer education, as executed by the US Army and the RAAF. Both of these systems are equally capable of producing SF FGOs who can generate the necessary effects demanded by the FOE. However, after comparing the benefits and disadvantages of each method, this research establishes conclusively that the regimental approach is the most appropriate solution for furthering SF officer development and ensuring airpower security.

Before presenting recommendations to develop SF officers for the FOE, it is necessary to discuss this study's conclusions concerning joint and cross-specialty training. Drawing from the experiences of the Luftwaffe's Objektschutzregiment and the RAAF's Airfield Defence Guards, it is apparent that great benefit can be gained from accomplishing initial and continuing training in a joint environment, similar to that which allows those forces to gain from the expertise of their Army counterparts in ground combat operations. These efforts prevent unnecessary duplication of effort, facilitate

doctrinal and operational interoperability, foster inter-service credibility, and promote mutual understanding of each force's mission and capabilities.

For the USAF SF, however, achieving this aim is complicated by the competing gender discrimination policies of the US Army Infantry, who limit their ranks to males only, and the USAF SF, who do not discriminate against female service members. For example, male SF officers are afforded the opportunity to attend the US Army Ranger School, but this training is not made available to female officers, providing a developmental imbalance within the officer corps. In observation of these competing policies, the USAF SF should pursue joint training to the degree possible, and execute its own programs where joint training is not possible or negates equal developmental opportunities for all officers. Furthermore, to ensure intra-service unity of effort, the USAF SF should integrate the common elements of its officer training programs with those of other protection related functions, as foreign ABD forces have done by organizationally integrating protection functions and the US Army has achieved by, for example, collocating the MP, engineer, and CBRN schools at the Maneuver Support Center. This degree of integration furthers interoperability and unity of effort for the force as a whole. With this general understanding of the advantages of, and obstacles to, joint and cross-specialty training, a presentation of the optimum officer development process for the USAF SF can begin.

Recommended Changes

The USAF SF's foreign partners realize that decisively facing the unique challenges of securing airpower in the FOE requires limiting the officer corps to those

who possess the mental agility, determination, and physical constitution to endure hardship and successfully lead airmen in ground combat operations, regardless of the obstacles to mission accomplishment. The USAF SF must come to the same conclusion if it is to be a relevant force on the future battlefield. As such, the USAF SF must pursue a competitive selection process which determines whether a candidate has the physical capacity and mental agility to function as a member of the USAF SF officer corps.

ABD is a physically demanding mission that requires potential members of the SF officer corps, as well as those within the force, to demonstrate an elevated degree of functionally-relevant physical fitness. This is not a new concept within the USAF. Special tactics airmen, such as combat control and para-rescue personnel, must maintain the unique standards of their Physical Ability and Stamina Test, which measures their capacity to perform combat-related tasks, such as underwater swimming. In a similar fashion, the USAF SF should routinely evaluate an airman's ability to perform functional activities such as carrying heavy loads over extended distances, maneuvering across obstacles, and carrying a wounded comrade. The exact makeup of an advanced combat fitness evaluation which serves this purpose is a subject for future study, but a possible solution may be found in the United States Marine Corps' Combat Fitness Test.

The Combat Fitness Test evaluates an individual's ability to perform tasks which may be replicated in a combat environment. It requires servicemen to sprint 880 yards (simulating a reaction to contact), perform repetitive lifts with 30 pound ammunition cans (as may be seen while loading ammunition or supplies onto a vehicle), and maneuver under fire (low/high crawl, casualty drag/fireman's carry, grenade toss and sprint with ammunition cans). Meeting the standards of a functional fitness evaluation, such as the

Combat Fitness Test, must become a routine requirement for SF officers and those hoping to join their ranks. Adopting this policy will serve to elevate the physical performance of the entire force.

Currently, selection for the USAF SF officer corps is not a competitive process. This policy must change to attract the high caliber personnel necessitated by the demands of the FOE. Selection in the future should be exercised in two competitive phases: (1) pre-screening, and (2) field evaluation. Pre-screening entails evaluating a candidate's official records, focusing on leadership capacity and mental agility, to select candidates who reflect the potential to serve as SF officers. Subsequently, drawing from the RAF Regiment's Potential Regiment Officer's Acquaintance Course, a competitive field evaluation would evaluate a candidate's overall fitness, communication skills, and leadership abilities under stress. Moreover, it would facilitate a selection decision based on a candidate's probability of successfully completing an arduous initial skills qualification regime and competently leading airmen in the field.

Within the USAF, examples abound of competitive officer selection processes. Special tactics officer candidates, for example, must pass competitive administrative and physical selection processes. In addition, Air Force Office of Special Investigations candidates undergo a thorough interview process in the pursuit of limited opportunities. Selection for Undergraduate Pilot Training, as well, is the result of a competitive selection process. These examples, as well as those used by foreign ABD forces analyzed in this study, further the credibility of these organizations within their services and the Joint, International, Intergovernmental and Multinational community. If the

USAF SF is to demand credibility on the battlefield of the future, it must be equally selective in choosing its members.

Furthermore, it must be noted that those officers who are selected for entry into initial skills training should not be assigned to operational units until they have successfully completed their initial training. The USAF SF's current process of assigning untrained officers to operational units, with the objective of familiarizing them with their expected duties and responsibilities in advance of initial skills qualification, damages the credibility of these junior officers in the view of the enlisted corps, weakens their self-confidence, and, thus, furthers an unhealthy relationship between them and their non-commissioned officers. This practice is rightfully shunned by the US Army and all of the foreign ABD forces analyzed in this study.

Alternatively, selection for the SF specialty should entail an administrative permanent change of station to the Security Force Center. Assigning these officers to the center allows for their centrally managed immersion into the USAF SF, familiarizing them with all facets of the force's doctrine, organization, training, materiel, leadership, personnel, and facilities. Adopting this policy mitigates the possibility of an unqualified officer occupying a manpower authorization in an operational unit, and, in a related manner, prevents undue pressure from being exerted on the training cadre to advance an unsuitable officer in response to the needs of the operational force. Moreover, it allows an officer's initial assignment decision to be informed by their performance in training, relative to their peers. The resulting competitiveness in training heightens the level of effort of all officers, increases the responsibility of the cadre, and furthers the credibility of the USAF SF.

The integrity of this process is further enhanced by an intense, demanding, and discriminating initial skills qualification protocol. Drawing upon the conclusions of the comparative analysis in chapter 4, it is apparent that producing officers who can effectively secure airpower against the full spectrum of possible threats requires uniquely skilled officers, capable of independent action and unconventional thought. Producing such officers is neither quick nor simple, as evidenced by the RAF Regiment's 37 week Junior Regiment Officer's Course, the RAAF Airfield Defence Guards' 22 month Ground Defence Officer training program, or the Commando de l'Air's 14 month initial officer training, but the result of a deliberate and focused effort which culminates in the development of air-minded warriors who are fully mission capable and command respect from the moment they enter the operational force. Viewed collectively, the experiences of the foreign ABD forces and sister services analyzed in this study suggest that an officer's initial training protocol should consist of three phases, in succession: (1) a Basic Officer Course, (2) an advanced tactical training pipeline, and (3) a capstone training exercise which evaluates the skills gained throughout this process.

The first step in this evolution is the SF Basic Officer Course. This event must appraise an officer's capacity to lead airmen in stressful environments, demonstrate mental agility, and design and execute flight-level operations. In so doing, it should reflect a focus on training the execution of the established SF METs. Junior officers preparing to lead airmen in today and tomorrow's complex operating environments must comprehend the tenets of Operational Art, Mission Command, Intelligence Preparation of the Operational Environment, Network-centric warfare, and combined operations. In view of the small, mobile forces they will be leading, they must also comprehend the

criticality of mobility in interdicting enemy personnel and resources, the need for intelligence driven offensive action as a component of active defense, and the value of shaping operations to deny the enemy freedom of maneuver. Furthermore, in an operating environment which increasingly places friendly forces and civilians within close proximity of friendly fires, these officers must become weapons employment experts, a degree of proficiency that far exceeds weapon system familiarization. In essence, the goal of an effective Basic Officer Course is to produce an officer who knows how to think, as opposed to what to think. Achieving this goal sets these junior officers up for success in continuing training and is imperative to ensuring robust airpower security efforts at the lowest tactical levels.

Evaluating officers regarding these capabilities requires the objective measurement of both tangible and intangible elements. As a result, unique authority resides with the training cadre, who must be discriminating in determining whether an officer possesses the capacity to successfully complete an advanced tactical training pipeline and lead airmen in a complex FOE. The cadre's increased prerogative and influence should drive a reevaluation of their composition and the command relationship between the SF schoolhouse, a component of Air Education & Training Command, and the SF Center, a Headquarters USAF direct reporting unit.

In view of their increased responsibility, and the Basic Officer Course's focus on leader development, the primary trainers of junior officers should be superior officers, not non-commissioned officers. While certain enlisted leaders may be instrumental in familiarizing officers with particular technical skills, such as small unit actions and weapons employment, the primary purpose of the Basic Officer Course is to assess and

develop officer leadership, a task which can only achieved by experienced officers. For this purpose, the USAF SF's foreign and sister service counterparts employ seasoned company grade officers as instructors and empower them with the ability to influence a decision making authority concerning an officer's fitness for duty. Enabling USAF SF trainers with this charge should drive a reappraisal of their interaction with the SF Center.

This relationship should reflect a similarity to those seen between the US Army's various schools and their respective centers, the RAF Regiment's Force Protection Centre and Force Protection Force Headquarters, and the Commando de l'Air's Training Squadron and BAFSI. In essence, the SF Center should exercise command and control of SF officer training. This transition serves several purposes. First, it keeps training and doctrine development efforts current and synchronized since both efforts are executed by the same organization. Second, by exercising greater influence over the cadre assignment process, it ensures that only individuals of the highest caliber, who possess recent operational experience, are assigned to this critical duty. Third, it heightens the training program's responsiveness to emerging threats, lessons learned, and developments in the operating environment. Lastly, it enables greater control and influence in evaluating whether a prospective SF officer is likely to succeed in this field or would more effectively contribute to the USAF in a different role. Considering the emerging threats identified in chapter 4, the SF Center's ability to exercise influence over officer training will be critical to ensuring the security of airpower in the FOE. Its role is also essential in establishing and maintaining the relationships necessary to design and utilize an advanced tactical training pipeline.

Research has shown that the desired capabilities of SF FGOs presented in chapter 4 must be grown from the onset of an officer's career. An advanced tactical training pipeline facilitates the development of this solid foundation. Recognizing that SF formal training was not meeting the requirements of the contemporary operating environment, the SF Center's Force Protection Battlelab devised an intriguing advanced tactical training pipeline in 2006, in an attempt to create a SF "weapons school," as an interim means to effecting transformation for the entire force (Lancaster and Rosario 2006, 3).

This initiative, known as Advanced Warfighter, proposed a selection process similar to that detailed above, followed by a pipeline consisting of the following phases: (1) the Joint Special Operations University course in Irregular Warfare, (2) the Air Education and Training Command Basic Instructor Course, (3) the Survival, Evasion, Resistance, and Escape school, (4) Advanced Urban Combat and Close Quarters Battle with the 1st/19th Special Forces Groups, and (5) a culminating exercise to evaluate the skills taught throughout this program (Lancaster and Rosario 2006, 3-4). While this program was initially intended to produce highly skilled personnel, enlisted and commissioned, who could be dispersed throughout the operational force, similar to current USAF weapons schools, this study concludes that these phases represent capabilities that all officers should possess. Furthermore, reflecting upon the desired capabilities of SF officers introduced in chapter 4, this pipeline should also incorporate Airborne, Air Assault, and Joint Fires Observer training. A pipeline consisting of a combination of these three programs and those proposed by the Advanced Warfighter initiative serves to develop within junior officers the skills which will enable them to support the SF METs and, unconventionally, counter future threats to airpower.

It should be noted that these programs represent capabilities, not specific venues for advanced schooling. For example, as identified in chapter 4, the FOE will require SF officers to demonstrate an innate ability to counter irregular and asymmetric threats. These skills can be gained by attending the Joint Special Operations University, as the Advanced Warfighter concept projected, but may also be gained by other external and internal means. Similarly, the FOE requires SF officers to possess a basic military parachutist certification and the capacity to insert into an area via fast-rope operations. Although, it may be most efficient to conduct this training at the US Army's Airborne and Air Assault schools, joint training venues which would further interoperability, it may be of equal or better value for the USAF SF to conduct this training internally, focused on the specific need to ensure tactical and operational mobility. Determining the appropriate venues for executing this necessary pipeline is a matter for further study. For the purposes of this analysis, the pipeline will be presented as identified above.

The Joint Special Operations University at Hurlburt Field, Florida, builds upon the solid foundation of the SF Basic Officer Course by instilling the academic fundamentals "for conducting irregular warfare in defense of air bases; contemporary insurgent warfare, influence & psychological operations, cross-cultural communications, and civil military operations" (Lancaster and Rosario 2006, 3). This grounding furthers an officer's understanding of the predicted asymmetric avoidance behavior of the USAF's likely adversaries and the primary operational approaches that can defeat these threats. Moreover, the joint orientation of this program furthers an officer's capacity to maximize Joint, Interagency, Intergovernmental, and Multinational interoperability.

Following this academic immersion, the pipeline should then focus on building the skills necessary to ensure mobility and survivability.

Considering the anti-access strategies the USAF must contend with in the FOE, airborne and air assault capabilities are necessary to enable airbase opening and contingency response operations. Furthermore, during BSZ and nuclear weapon security operations, these capabilities allow SF personnel to rapidly exploit the intelligence gained from tactical C4ISR. Inculcating these skills in junior officers facilitates the efficient development and management of an operational unit's airborne and air assault capability, and promotes greater flexibility in the force pool of personnel available for assignment to an airborne unit.

Commensurate with the ability to move on the battlefield is the need to survive its effects. Operating within the BSZ increases an airman's vulnerability to enemy action. This threat warrants attending the USAF's Survival, Evasion, Resistance, and Escape course, providing potentially lifesaving skills to SF personnel attempting to survive in austere terrain and evade capture by hostile forces. In addition, this course facilitates a deeper understanding of the effects of terrain and climate on individual mobility. As an added benefit, it also serves to facilitate greater interoperability and mutual understanding with USAF aircrew personnel, its primary audience. This common purpose is further advanced by Joint Fires Observer certification.

SF officers operating within the BSZ must be capable of bringing joint fires to bear, when needed, to counter enemy activity and support troops in contact. Joint Terminal Attack Controllers and Air Liaison Officers are the most effective means of delivering these fires, but due to their limited numbers, their presence on the battlefield

cannot be guaranteed. As a result, SF officers must be trained, at a minimum, to the level of a Joint Fires Observer. This training, executed by the 6th Combat Training Squadron at Nellis AFB, Nevada, produces officers who understand the limitations and capabilities of various forms of ordnance and their delivery systems, and can safely and effectively transmit targeting information to weapon system operators which decreases the likelihood of fratricide (USAF 2009a). Delivering effective fires allows tomorrow's small and mobile SF units to mass effects, a crucial skill in close quarters battle.

As discussed in chapter 4, the asymmetric avoidance behavior of the USAF's future adversaries will manifest itself in the need to achieve dominance over restrictive physical terrain, containing a combination of urban and rural topography and varying degrees of population density (Australian Army 2005, 11). Kirkuk AB, Iraq, for example, is bordered on one side by dense urban terrain and open foothills on others. Joint Base Balad, Iraq, is bordered by the Euphrates River, an unconventional avenue of approach for hostile forces. SF officers operating in environments of this nature require enhanced capabilities in the conduct of "military operations in urban terrain, river crossing and amphibious operations, and high risk protection" (Lancaster and Rosario 2006, 4). Advanced urban combat and close quarters battle training facilitates the development of these crucial competencies, and refining this expertise within the officer corps furthers collective skills training within the force.

Inherent within an officer's duties is the responsibility to train and mentor subordinates. In observation of this principle, the advanced tactical training pipeline should ensure that all officers are taught the Air Education and Training Command's Basic Instructor Course, enabling them to train their organizations and transform the

force. This instructor certification not only benefits the operational force, but enables the conduct of Security Force Assistance missions, enhancing the SF contribution to capacity-building efforts and national security strategy.

The proposed advanced tactical training pipeline culminates in a capstone training exercise which evaluates the cumulative application of the skills gained from this process. In practice this exercise should entail a planned airborne or air assault insertion into an austere operating environment, and the execution of active defense operations against opposing forces who replicate the unpredictable irregular tactics of the USAF's likely adversaries. This event must allow junior officers to demonstrate their capacity to generate effects at the tactical level they will be operating at in the onset of their careers.

Initial officer development is the bedrock of a successful SF officer. Preparing the force to secure airpower in an uncertain future, against a full spectrum of emerging threats, requires selecting only the most capable personnel and training them extensively so that they will be the absolute experts in providing protection for an expeditionary air force. This training, consisting of a Basic Officer Course and an advanced tactical training pipeline, must be focused on the development of officer leadership and the requisite skills needed to support the established SF METs. Refining these capabilities further is the objective of advanced officer development.

As previously demonstrated in chapter 4, there are two distinct approaches to the conduct of advanced officer development. These approaches are shaped by two markedly divergent variances to a force's organizational structure: regimental and non-regimental. Adoption of either of these solutions, while advancing officer development

in both cases, presents the USAF with specific benefits, disadvantages, and responsibilities.

Applying the regimental model to the USAF SF would entail the centralized control and decentralized execution of protection as a functional capability. In practice, this system would result in removing SF squadrons from the operational control of the organizations they currently secure and involve retaining this command authority within an organization that is charged with executing protection operations in concert with Headquarters USAF priorities. The benefits of this approach are numerous. First, it allows for the efficient and prioritized employment of limited SF assets. Second, it enables the standardization and integration of all forces contributing to the protection function. Third, it furthers unity of effort amongst the force. Fourth, it facilitates the standardization of materiel and organizational constructs. Fifth, it increases the flexibility and responsiveness of the force pool to emerging threats and adjustments to service priorities. Lastly, as determined in chapter 4, it creates a normative effect in advanced officer development, which negates the need for significant formal officer continuation training. In spite of these merits, a regimental approach does have a notable detractor. This shortcoming is simply that a regimental system serves to weaken the command authority of, and SF responsiveness to, the directly supported unit. This shortcoming can be overcome by clearly articulating the responsibilities of the SF squadron in defending this organization, or by placing SF squadrons under the operational control of supported forces, while retaining administrative control within the proposed regimental construct.

Conversely, a non-regimental approach, as currently executed by the USAF SF, US Army, and RAAF Airfield Defence Guards, strengthens the command authority of the supported organization and weakens the centrally managed control and execution of the Protection function. For the USAF this structure has contributed to a garrison-focused mentality that limits a unit's cohesion and expeditionary focus. Moreover, it has inhibited advanced officer development by limiting the mentorship provided to SF officers by more senior SF personnel, and has obscured the focus of these officers from the larger priorities of Protection in the USAF, to the more parochial interests of particular major commands and missions. This condition contributes to the previously described professional imbalance, wherein an SF officer's experience becomes weighted in nuclear security, air base defense, or law enforcement, as opposed to maintaining a full spectrum focus on the security of airpower against all threats.

To address this deficiency, the RAAF Airfield Defence Guards and US Army commit significant resources to formal advanced officer education, in the form of lengthy advanced officer and career courses, which aim to provide their services with a uniform effect in the FGOs from their respective organizations. The USAF SF also has an advanced officer course, but, in practice, this short 5-day course more accurately serves the valuable function of pre-command training, instructing officers in the administrative responsibilities associated with squadron command. Applying the RAAF and Army models to the USAF SF would result in a much different program.

An SF advanced officer course must serve several crucial functions: (1) uniformly developing all officers to defend airpower in a full spectrum environment, utilizing the desired capabilities presented in analysis, (2) inculcating within the officer corps the

skills needed to lead ground combat operations, above Flight level, (3) advancing the execution of operational decision making processes, such as the Integrated Defense Risk Management Process, and (4) furthering the force's capacity to incorporate Protection planning into staff actions at all echelons. Furthermore, this course provides an opportunity for senior SF leaders to inform and shape the SF officer corps concerning developments in doctrine, organization, training, materiel, leadership, personnel, and facilities; changes in the operational environment; emerging capabilities; and perceived threats to airpower. Executed properly, this course ensures that SF officers provide a uniform effect for the USAF.

Yet, the comparative analysis in chapter 4 gives ample evidence that the current non-regimental approach is sub-optimal in advancing officer development and designing a combat-focused and capabilities-based force. The recent transformations of Germany's Objektschutzregiment and France's BAFSI into regimental organizations which integrate the complementary aspects of the Protection function, supported by the historical example of the RAF Regiment, demonstrate conclusively that this organizational construct is the most efficient and effective means to defeating the emerging threats to airpower. For this reason, this study recommends that transformation within the USAF SF, while continuing to incorporate many of the noteworthy efforts envisioned in the original *Transformation Strategic Plan* and *Master Action Plan 2010-2015*, transition towards reorganizing the force, regimentally.

In addition, this organizational shift must reflect a holistic integration, at the USAF level, of Protection as a joint function. Analysis in chapter 4 demonstrates that the USAF's allies have achieved great organizational integration of complementary

Protection functions, facilitating unity of effort, preserving economy of force, and advancing their common effectiveness in meeting future challenges. Applying this model to the USAF should result not only in a synchronization of SF and complementary Protection functions such as explosive ordnance disposal, fire defense, engineering, and CBRN, but an integration of these functions within a common organizational construct. An organization possessing the composite capabilities of this force would guarantee unsurpassed protection for the USAF, and facilitate power projection and operational reach.

Recommendations for Further Study

While this analysis has demonstrated the optimum method to develop SF FGOs capable of guaranteeing airpower security in the face of future challenges, realizing this effect will be contingent upon further analysis of several enabling factors. First, implementing an innovative development process necessitates identifying the particular manpower and materiel requirements which will ensure this program's success.

Fortunately, the experiences of the USAF SF's foreign and sister service partners provide prescient examples of the resource implications inherent in ambitious officer training programs. Second, executing an advanced tactical training pipeline requires the identification of training venues and opportunities for exploiting joint training. Third, implementing competitive pre-selection and initial skills development protocols requires the formulation of minimum standards, such as the previously discussed functional fitness metric. Fourth, integrating complementary protection systems into a common USAF organizational construct calls for further analysis of this organization's structure

and authority. Specifically, research should determine whether it is optimal to form one regimental structure, such as the BAFSI or Objektschutzregiment, or, in consideration of the size and scope of the USAF, several regimental organizations with functional or geographic orientation, such as that demonstrated by the US Army's Special Forces Groups. Finally, this analysis demonstrated that the USAF SF, in concert with NATO and ASIC partners, should endeavor to maximize interoperability in the defense of airpower. Realizing this goal requires the development of commonly agreed to standards and operational methods, the product of considerable doctrinal integration efforts.

Conclusion

In a future rife with uncertainty and dominated by persistent conflict, one constant remains: the need for airpower to rapidly respond to security challenges. Ensuring the availability of this capability requires highly skilled SF officers, capable of executing full-spectrum security operations in an increasingly complex, diverse, diffuse, and lethal operating environment. Such officers are assets which can only result from focused development efforts. Generating this competency within the USAF SF necessitates a holistic revision of officer selection, initial skills training, and advanced development.

Competitive selection processes ensure the highest degree of competency within the officer corps, a prerequisite for success in tomorrow's fluid and complex operating environment. Robust initial skills training lays a strong foundation for operational success and ensures the combat readiness of the junior officer force. Advanced officer development, pursuant to the regimental or non-regimental approaches detailed in this

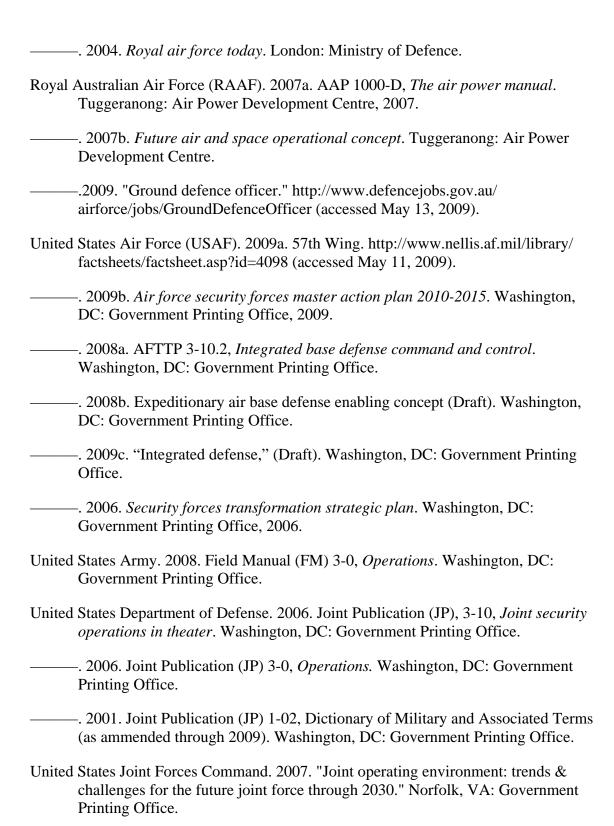
chapter, builds upon this basis and produces FGOs who can defeat the emerging threats to airpower.

Developing a regimental organization which integrates the complementary elements of the protection function within the USAF heightens the service's operational readiness and maximizes the efficient employment of limited Protection forces.

Moreover, this regimental system will replicate the normative effect demonstrated by the RAF Regiment, BAFSI, and Objektschutzregiment, providing a uniform effect for the USAF in the SF FGO corps. Realizing these goals will enable SF transformation, further the development of a combat-focused and capabilities-based force, and ensure the unrivaled protection of the USAF in tomorrow's complex battlefield.

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